PERSONAL AND CONFIDENTIAL

Board of Trustees Kentucky Retirement Systems Perimeter Park West 1260 Louisville Road Frankfort, Kentucky 40601

Members of the Board:

The forty-fifth annual actuarial valuation of the Kentucky Employees Retirement System, the forty-second annual actuarial valuation of the County Employees Retirement System, and the forty-third annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. The valuations were made on the basis of data provided by the Retirement System as of June 30, 2001.

On the basis of the assumptions as stated in each report and the data furnished us by the Administration of the Retirement Systems, it is certified that the valuations have been made by the use of generally accepted actuarial principles and that, if the recommendations of the reports are followed, adequate provision will be made for the funding of future benefits.

The three Retirement Systems are actuarially sound based on the continuation of current funding policies adopted by the Board. Adequate provision is being made for the funding of the Actuarial Accrued Liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes, as appropriate funding rates have been established by the Board for this purpose.

Respectfully Submitted, WILLIAM M. MERCER, INCORPORATED

By Stephen A. Gagel, F.S.A.

SAG/lst

ANNUAL ACTUARIAL VALUATION

JUNE 30, 2001

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

COUNTY EMPLOYEES RETIREMENT SYSTEM

STATE POLICE RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

Prepared by:

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October, 2001

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

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COUNTY EMPLOYEES RETIREMENT SYSTEM

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STATE POLICE RETIREMENT SYSTEM

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FORTY-FIFTH ANNUAL ACTUARIAL VALUATION JUNE 30, 2001 KENTUCKY EMPLOYEES RETIREMENT SYSTEM FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the forty-fifth annual actuarial valuation of the Kentucky Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2001.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contributions for the ensuing fiscal year required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding, as defined in KRS 61.565, provides that the actuarial valuation method is uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide member's benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "levelpercentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less

than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased at the start of each biennium (coincides with valuations in odd numbered years) by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016. There will be no change in the even numbered years unless there are actuarial gains relative to the retirement funding which will then be used to increase the medical insurance funding rate for the next year only.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation, as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase.

In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System (with the exception of the rate of retirement). The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

- 1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.
- 2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.
- 3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.
- 4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.
- 5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	DETIDEME		INICI ID ANIC	E EIND
	RETIREME	NI FUND	INSURANCE FUND	
	Non	** 1	Non Hazardous	** 1
	Hazardous	Hazardous		Hazardous
June 30, 2000 Valuation Assets	6,806,675,460	336,213,464	399,560,252	102,212,237
Cash Flows				
> Employer Contributions	21,911,066	10,377,708	66,874,871	13,226,298
> Member Contributions	104,125,142	10,545,410		
> Retirement Benefits	291,704,431	7,995,608		
> Net Refunds	4,529,059	1,221,586		
> Insurance Premiums			37,286,345	1,982,382
> Administrative Expenses	3,826,370	302,411	308,411	24,658
> Investment Manager Fees	2,148,031	109,545	35,681	8,588
Valuation Interest Assumption	8.25%	8.25%	8.25%	8.25%
Expected Return on Valuation Assets				
Reflecting Actual Cash Flows *				
	554,283,644	28,203,487	34,170,054	8,894,950
Expected Valuation Assets	7,184,787,421	375,710,919	462,974,740	122,317,857
Actual Market Value of Assets	5,484,563,749	305,543,701	396,254,063	107,592,284
Investment Gain/(Loss)	(1,700,223,672)	(70,167,218)	(66,720,677)	(14,725,573)
Amortization Amounts From Prior				
Valuations				
> Valuation Year - 1				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 2				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 3				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 4				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
Unamortized Amount of Gain/(Loss)				
From Prior Valuations	0	0	0	0
Investment Gain/(Loss) to be				
Amortized from Current Valuation				
Date				
> Amount	(1,700,223,672)	(70,167,218)	(66,720,677)	(14,725,573)
> Amortization	(340,044,734)	(14,033,444)	(13,344,135)	(2,945,115)
June 30, 2001 Valuation Assets				
> Expected Assets	7,184,787,421	375,710,919	462,974,740	122,317,857
> Amortization Amounts	(340,044,734)	(14,033,444)		(2,945,115)
> Valuation Assets	6,844,742,687	361,677,475	449,630,605	119,372,742

^{*} Cash flows are assumed equally spread throughout the year

A. <u>STATEMENT OF ACTUARIAL ASSUMPTIONS</u>

- (1) Mortality:
 - (a) Active & retired lives 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005

per year for hazardous duty employees.

- (b) Disabled lives
- Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).

(2) Disablement

- Graduated rates based on 2000 experience study (no change from 1995 experience study).
- (3) Termination of employment #
- Graduated select (non-hazardous and hazardous) and ultimate rates based on 2000 experience study.

(4) Retirement #

- Non-Hazardous:

Age Ret	irement Rate
55-57	.04
58-59	.05
60-61	.06
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 & Over	1.00

At age 55-64 in lieu of the age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits.

<u>Hazardous</u>: Assumed that 50% will retire as soon as eligible for unreduced benefits and balance will continue to age 60.

(5) Marital status

(a) Percentage married - 100%.

(b) Age difference - Males are assumed to be 3 years older than their spouses.

(6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed that the employee is survived by 2

dependent children, each age 6.

(7) Investment return - 8.25% per year, net of investment related expenses, compounded annually.

(8) Compensation progression # - 1st year: 12.00%

2nd year: 10.00% 3rd year: 8.00%

Thereafter: 6.50%, compounded annually.

(9) Underlying Inflation Rate - 3.5% per year; reflected in investment return and compensation progression

assumptions.

(10) Retiree Medical Insurance # - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution

rates were assumed to be as follows:

Rate in Effect
on Valuation Date
\$252.46
293.46
273.52
234.00
577.00
350.00
525.00
96.41
229.03

Region 1: Boyd, Carter, Elliott, Greenup

Region 2: Christian, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Todd, Trigg, Union, Webster

Region 3: Harlan, Lewis, Mason, Perry, Roberston

	Medicare Rate		Contracts in Force	
	Low	High	Low	High
<u>Carrier</u>	Option	Option	Option	Option
Anthem BC/BS	101.26	231.35	2,839	17,314
Bankers Life	91.78	216.94	272	156
Option 2000	83.05	216.51	504	1,767
Humana	85.00	247.00	490	1,729
Humana				
Gold Plus	85.00	136.00	17	507

^{*}Weighted average of current rates available from different carriers; weighting based on number of contracts in force.

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

Years	Medical Increase
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data

- For those active members with incomplete data, the following assumptions were made:
 - . If reported salary was zero or blank, then monthly salary was assumed to be \$887.58
 - . If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:
 - . Service under all systems is aggregated for purposes of determining benefit eligibility.
 - . Future service is projected only under the system in which the member is currently active.
 - . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
 - . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Changes in assumptions from those used in 2000 valuation.

B. <u>SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*</u>

(1) Annual Rates of Mortality:

Active Mortality			Disabled Mortality	
<u>Age</u>	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

<u>Age</u>	<u>Disablement</u>	<u>Ultimate Termination</u>
25	0.033%	2.40%
30	0.039%	2.40%
40	0.105%	2.00%
50	0.423%	1.60%
55	0.794%	1.20%
60	1.395%	0.20%

(3) Select Rates of Termination:

Years of Service	Select Termination		
	Non-Hazardous	<u>Hazardous</u>	
1	35.0%	30.0%	
2	10.0%	8.0%	
3	7.0%	4.0%	
4	5.0%	4.0%	
5	4.0%	4.0%	

(4) Compensation Progression (after 1st 3 Years):

		Compensation at Normal
	Rate of	Retirement as Percentage
Age	Annual Increase	Of Current Annual Compensation
		-
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

^{*}Sample rates for hazardous position employees (other than select termination) are included in the State Police Retirement System valuation.

SECTION III

RESULTS OF THE 2001 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the expenses of administration, is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated annual State payroll as of June 30, 2001.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2001 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate of the State is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the Kentucky Employees Retirement System as of June 30, 2001 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements for the Retirement Fund.

Table X contains information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I

KENTUCKY EMPLOYEES RETIREMENT SYSTEM RETIREMENT AND INSURANCE FUND DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2001

UNFUNDED ACTUARIAL ACC	RUED LIABILITY - RETIREMENT	
		Percent *
Total Actuarial Accrued Liability	\$ 5,729,229,055	347.49%
Assets at Actuarial Value	7,206,420,161	437.09%
Unfunded Actuarial Accrued Liability	\$ (1,477,191,106)	(89.60%)
Contribution - Payment on Unfunded		
A ctuarial A ccrued Liability	\$ (75,262,003)	(4.56%)
NORMAL COST	T - RETIREMENT FUND	
Retirement Benefits	\$ 132,622,005	8.04%
Disability Benefits	16,000,088	0.97%
W ithdraw al Benefits (Vested and		
Refund of Contributions)	11,052,931	0.67%
Survivor Benefits	8,420,856	0.51%
Total Normal Cost	\$ 168,095,880	10.19%
Less: Employee Contributions	85,224,762	5.17%
Normal Cost - State	\$ 82,871,118	5.02%
TOTAL ANNUAL EMPLOYER COS	T - RETIREMENT AND INSURAN	CF FUND
Non-Hazardous Duty Cost		
Normal Cost	\$ 71,104,685	4.66% **
Payment on Unfunded Actuarial		
Accrued Liability	(71,246,407)	(4.67%) **
Administrative Expense	5,364,981	0.35% **
Subtotal - Retirement Fund	, ,	
(Not Less Than Zero)	\$ 5,223,259	0.34% **
Group Hospital and Medical		
Insurance Premiums	84,642,494	5.55% **
Total Annual Cost	\$ 89,865,753	5.89% **
Hazardous Duty Cost		
Normal Cost	\$ 11,766,433	9.52% ***
Payment on Unfunded Actuarial		
Accrued Liability	(4,015,596)	(3.25%) * * *
Administrative Expense	374,301	0.30% ***
Subtotal - Retirement Fund		
(Not Less Than Zero)	\$ 8,125,138	6.57% ***
Group Hospital and Medical		
Insurance Premiums	15,171,537	12.27% ***
Total Annual Cost	\$ 23,296,675	18.84% ***
Based on estimated annual salaries		
* Total	\$ 1,648,737,395	
** Non-Hazardous Position Employees	\$ 1,525,089,988	
*** Hazardous Position Employees	\$ 123,647,407	

TABLE II KENTUCKY EMPLOYEES RETIREMENT SYSTEM RETIREMENT FUND

CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2001

	N	Non-Hazardous Position Employees		Hazardous Position Employees		Total
ACT	UARI	AL ACCRUED LIA	BILI	TY		
Active Members						
Retirement Benefits	\$	2,382,224,431	\$	180,582,151	\$	2,562,806,582
Disability Benefits		157,611,834		10,217,619		167,829,453
Withdraw al Benefits (Vested and						
Refund of Contributions)		85,133,457		904,066		86,037,523
Survivor Benefits		149,310,476		7,117,656		156,428,132
Total - Actives	\$	2,774,280,198	\$	198,821,492	\$	2,973,101,690
Inactive Members						
Retired Members and						
Beneficiaries	\$	2,621,725,952	\$	83,538,933	\$	2,705,264,885
Vested Retirement		34,959,866		2,055,232		37,015,098
Vested Membership		13,069,278		778,104		13,847,382
Total - Inactives	\$	2,669,755,096	\$	86,372,269	\$	2,756,127,365
Total Actuarial Accrued Liability	\$	5,444,035,294	\$	285,193,761	\$	5,729,229,055
UNFUNDE	DAC	TUARIAL ACCRUI	ED L	IABILITY		
Total Actuarial Accrued Liability	\$	5,444,035,294	\$	285,193,761	\$	5,729,229,055
Less Actuarial Value of Assets		6,844,742,687		361,677,475		7,206,420,161
Unfunded Actuarial Accrued Liability	\$	(1,400,707,393)	\$	(76,483,714)	\$	(1,477,191,106)
	ſ	NORMAL COST				
Retirement Benefits	\$	115,043,802	\$	17,578,203	\$	132,622,005
Disability Benefits		14,069,688		1,930,400		16,000,088
W ithdraw al Benefits (Vested and						
Refund of Contributions)		10,283,646		769,285		11,052,931
Survivor Benefits		7,497,420		923,436		8,420,856
Total Normal Cost	\$	146,894,556	\$	21,201,324	\$	168,095,880
Less Employee Contributions	1	75,789,871		9,434,891		85,224,762
Total Normal Cost - State	\$	71,104,685	\$	11,766,433	\$	82,871,118

TABLE III KENTUCKY EMPLOYEES RETIREMENT SYSTEM UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

	Amount o	f Base on						
Date Established	Date Established	Current Valuation Date		Amortization Payment	Source of Base			
Non-Hazardous Position Employees								
6/30/1990 \$	256,534,456	\$ 320,210,968	\$	21,867,527	Cumulative unfunded actuarial accrued liability set up as initial			
					base under revised funding policy (30 year level percent of payroll			
					method)			
6/30/1991	103,692,389	128,098,504	\$	8,425,551	Experience gains/losses for 7/1/1990 to 6/30/1991			
6/30/1992	(212,448,599)	(259,120,054)	\$	(16,455,160)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's;			
					Asset valuation method change			
6/30/1993	(57,917,315)	(69,590,195)	\$	(4,276,039)	Experience gains/losses for 7/1/1992 to 6/30/1993; State			
					contribution shortfall			
6/30/1994	59,519,052	70,310,083	\$	4,188,653	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's;			
					State contribution shortfall			
6/30/1995	65,659,241	76,117,631	\$	4,404,471	Experience gains/losses for 7/1/1994 to 6/30/1995			
6/30/1996	(188,573,585)	(214,176,369)	\$	(12,057,487)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuaria			
					assumptions; Correction of pension allocation for members in pay			
					status with both non-hazardous and hazardous service in KERS			
6/30/1997	(277,888,742)	(308,486,216)	\$	(16,922,320)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree			
					COLA effective 8/1/1996			
6/30/1998	(326,522,755)	(353,786,834)	\$	(18,936,794)	Experience gains/losses for 7/1/1997 to 6/30/1998; Increase in deatl			
					benefit from \$2,500 to \$5,000; 3.0% retiree COLA effective 7/1/1997			
6/30/1999	(362,615,121)	(382,978,122)	\$	(20,028,607)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree			
					COLA effective 7/1/1998; Benefit multiplier change effective			
6/30/2000	(964,739,576)	(992,010,673)	\$	(50,749,282)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree			
					COLA effective 7/1/1999			
6/30/2001	584,703,884	584,703,884	\$	29,293,080	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree			
					COLA effective 7/1/2000; 3-year average earnings window			
Total \$	(1,320,596,671)	\$ (1,400,707,393)	\$	(71,246,407)				

TABLE III (Continued)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

	Amount of	Amount of Base on							
Date	Date	Current	Amortization						
Established	Established	Valuation Date	Payment	Source of Base					
Hazardous Position Employees									
6/30/1990	\$ (366,782)	\$ (457,824)	\$ (31,265)	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)					
6/30/1991	8,515,857	10,520,238	691,958	Experience gains/losses for 7/1/1990 to 6/30/1991					
6/30/1992	(2,222,347)	(2,710,559)	(172,131)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change					
6/30/1993	1,873,766	2,251,411	138,340	State contribution shortfall					
6/30/1994	2,736,468	3,232,600	192,579	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall					
6/30/1995	4,677,834	5,422,931	313,792	Experience gains/losses for 7/1/1994 to 6/30/1995					
6/30/1996	(33,735,166)	(38,315,417)	(2,157,043)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non- hazardous and hazardous service in KERS					
6/30/1997	(7,971,975)	(8,849,744)	(485,462)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996					
6/30/1998		(15,056,785)	(805,929)	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit from \$2,500 to \$5,000; 3.0% retiree COLA effective 7/1/1997					
6/30/1999		(14,683,034)	(767,879)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998					
6/30/2000	(35,735,060)	(36,745,212)	(1,879,812)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999					
6/30/2001	18,907,681	18,907,681	947,256	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000					
Total	\$ (71,118,514)	\$ (76,483,714)	\$ (4,015,596)						

TABLE IV KENTUCKY EMPLOYEES RETIREMENT SYSTEM INSURANCE FUND

DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2001

DETERMINATION OF EI		on-Hazardous		Hazardous		<u>. </u>
	"	Position		Position		
				Employees	Total	
Λ.C.1		Employees AL ACCRUED LIA	BII I.			TOTAL
Active Members	S	985,035,272	\$	137,293,626	\$	1,122,328,898
Inactive Members	\dashv	703,033,272	Ψ	137,273,020	Ψ	1,122,320,070
Retired Members	- \$	730,675,961	\$	60,211,381	\$	790,887,342
Beneficiaries	*	1,126,182	Ψ	13,157,907	Ψ	14,284,089
Vested Retirement		52,745,683		3,787,908		56,533,591
Vested Membership		0		0		0
Total - Inactives	\$	784,547,826	\$	77,157,196	\$	861,705,022
Total Actuarial Accrued Liability	\$	1,769,583,098	\$	214,450,822	\$	1,984,033,920
	D 4 C	TUARIAL ACCRU				
Total Actuarial Accrued Liability	I \$	1,769,583,098	\$ S	214,450,822	\$	1,984,033,920
Less Actuarial Value of Assets	Φ	449,630,605	Ф	119,372,742	Φ	569,003,346
Unfunded Actuarial Accrued Liability	\$	1,319,952,493	\$	95,078,080	\$	1,415,030,574
omanded Actuarian Accided Liability			Ψ	75,076,000	Ψ	1,415,030,574
		ORMAL COST				
Gross Normal Cost	\$	81,313,764	\$	18,122,736	\$	99,436,500
Less Employee Contributions		0	_	0		0
Net Normal Cost - State	\$	81,313,764	\$	18,122,736	\$	99,436,500
Estimated Annual Salaries	\$	1,525,089,988	\$	123,647,407	\$	1,648,737,395
тот	ALAN	NUAL EMPLOYE	R CO	ST		
Contribution Amount						
Normal Cost	\$	81,313,764	\$	18,122,736	\$	99,436,500
Payment on Unfunded Actuarial						
Accrued Liability		72,885,260		5,255,159		78,140,419
Total Annual Cost	\$	154,199,024	\$	23,377,895	\$	177,576,919
As Percent of Payroll						
Normal Cost		5.33%		14.66%		6.03%
Payment on Unfunded Actuarial						
Payment on Unfunded Actuarial Accrued Liability		4.78%		4.25%		4.74%
Payment on Unfunded Actuarial				4.25% 18.91%		
Payment on Unfunded Actuarial Accrued Liability Total Annual Cost	URAN	4.78%	ΓFAL	18.91%		4.74% 10.77%
Payment on Unfunded Actuarial Accrued Liability Total Annual Cost INS Full Entry Age Funding Level	URAN	4.78% 10.11%	ΓFAL	18.91%		10.77%
Payment on Unfunded Actuarial Accrued Liability Total Annual Cost INS Full Entry Age Funding Level Current Funding Allocation *	URAN	4.78% 10.11% CE FUND SHOR	ΓFAL	18.91% L		10.77%
Payment on Unfunded Actuarial Accrued Liability Total Annual Cost INS Full Entry Age Funding Level Current Funding Allocation * Additional to Pick Up By 2016	URAN	4.78% 10.11% CE FUND SHORT 10.11%	ΓFAL	18.91% L 18.91%		10.77% 10.77% 0.00%
Payment on Unfunded Actuarial Accrued Liability Total Annual Cost INS Full Entry Age Funding Level Current Funding Allocation *	URAN	4.78% 10.11% CE FUND SHORT 10.11% 4.67%	ΓFAL	18.91% L 18.91% 11.14%		10.77% 10.77% 0.00%
Payment on Unfunded Actuarial Accrued Liability Total Annual Cost INS Full Entry Age Funding Level Current Funding Allocation * Additional to Pick Up By 2016		4.78% 10.11% CE FUND SHORT 10.11% 4.67% 5.44%		18.91% L 18.91% 11.14% 7.77% 0.00%		

TABLE V

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2001

	Amount of			INSURANCE FUND - JUNE 30, 2001
Date	Date	Current	Amortization	
Established	Established	Valuation Date	Payment	Source of Base
	I	Non-	-Hazardous Positi	on Employees
6/30/1996	\$ 988,745,810	\$1,122,988,610		
6/30/1997	(31,222,593)	(34,660,416)	(1,901,332)	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	19,914,214	21,577,017	1,154,931	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(69,145,663)	(73,028,604)	(3,819,177)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	44,198,913	45,448,321		Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	237,627,565	237,627,565	11,904,903	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
Total	\$1,190,118,246	\$1,319,952,493	\$ 72,885,260	
			zardous Position	
6/30/1996	\$ 61,002,123	\$ 69,284,431	\$ 3,900,506	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	15,100,456	16,763,122	919,558	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	2,832,306	3,068,799	164,261	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(10,377,564)	(10,960,325)	(573,192)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	(3,445,265)	(3,542,656)	(181,235)	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	20,464,709	20,464,709	1,025,261	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
Total	\$ 85,576,765	\$ 95,078,080	\$ 5,255,159	

TABLE VI KENTUCKY EMPLOYEES RETIREMENT SYSTEM BENEFIT PAYMENT PROJECTIONS

	RETIREMENT FUND PAYMENT PROJECTIONS							
		Non-Hazardous	Hazardous					
		Position	Position					
Plan Yea	ar	Employees	Employees	Total				
7/1/2001 to 6	6/30/2002	314,660,000	11,226,000	325,886,000				
7/1/2002 to 6	6/30/2003	333,058,000	13,008,000	346,066,000				
7/1/2003 to 6	6/30/2004	352,130,000	14,770,000	366,900,000				
7/1/2004 to 6	6/30/2005	373,663,000	16,838,000	390,501,000				
7/1/2005 to 6	6/30/2006	398,377,000	19,125,000	417,502,000				
7/1/2006 to 6	6/30/2007	426,620,000	21,699,000	448,319,000				
7/1/2007 to 6	6/30/2008	456,677,000	25,101,000	481,778,000				
7/1/2008 to 6	6/30/2009	490,726,000	29,156,000	519,882,000				
7/1/2009 to 6	6/30/2010	524,749,000	33,535,000	558,284,000				
7/1/2010 to 6	6 <i>/</i> 30 <i>/</i> 2011	561,348,000	37,615,000	598,963,000				

INSURANCE FUND PAYMENT PROJECTIONS Non-Hazardous Hazardous Position Position Plan Year **Employees** Employees Total 7/1/2001 to 6/30/2002 47,680,000 4,144,000 51,824,000 7/1/2002 to 6/30/2003 54,005,000 4,895,000 58,900,000 7/1/2003 to 6/30/2004 60,485,000 66,182,000 5,697,000 7/1/2004 to 6/30/2005 67,313,000 6,605,000 73,918,000 7/1/2005 to 6/30/2006 75,199,000 7,683,000 82,882,000 7/1/2006 to 6/30/2007 83,779,000 8,849,000 92,628,000 7/1/2007 to 6/30/2008 92,595,000 10,271,000 102,866,000 7/1/2008 to 6/30/2009 102,629,000 11,970,000 114,599,000 7/1/2009 to 6/30/2010 114,124,000 14,088,000 128,212,000 7/1/2010 to 6/30/2011 126,747,000 16,248,000 142,995,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

TABLE VII

KENTUCKY EMPLOYEES RETIREMENT SYSTEM RETIREMENT FUND

ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIA	L ASSETS			
Fund Assets at Actuarial Value (Plus Refunds and				
Expenses Payable) *		\$	7,206,420,161	
Actuarial Present Value of Future Member Contribut			984,772,747	
Actuarial Present Value of Future Employer				
Contributions				
For Normal Costs	\$	880,066,904		
For Unfunded Actuarial Accrued Liability		(1,477,191,106)		
Total			\$	(597,124,202)
Total Actuarial Assets			\$	7,594,068,706
ACTUARIAL	LIABILITIES	6	•	
Actuarial Present Value of Future Benefits				
Inactive Members:				
Retired Members and Beneficiaries	\$	2,705,264,885		
Vested Retirement		37,015,098		
Vested Membership		13,847,382		
Total - Inactive			\$	2,756,127,365
Actuarial Present Value of Future Benefits				
Active Members:				
Retirement Benefits	\$	4,034,992,143		
Disability Benefits		335,398,531		
Withdraw al Benefits (Vested and				
Refund of Contributions)		219,022,476		
Survivor Benefits		248,528,191		
Total - Active			\$	4,837,941,341
Refunds and Expenses Payable			\$	0
Total Actuarial Liabilities			\$	7,594,068,706
Notes				
* Values as of June 30, 2001				
Market value of assets:	No	n-Hazardous	\$	5,484,563,749
	Hai	zardous	\$	305,543,701
	Tot	al	\$	5,790,107,450
Actuarial value of assets:			\$	7,206,420,161
Member's Contribution Account:			\$	895,839,477
** Present value of accrued benefit deferred to no	rmal retire	ment date.		

TABLE VIII KENTUCKY EMPLOYEES RETIREMENT SYSTEM INSURANCE FUND ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIAL A	SSETS			
Fund Assets at Actuarial Value (Plus Refunds and				
Expenses Payable) *			\$	569,003,346
Actuarial Present Value of Future Member Contribution	s (Note:	AII		
Future Member Contributions Credited Against Retir	ement F	und)		0
Actuarial Present Value of Future Employer				
Contributions				
For Normal Costs	\$	1,183,577,357		
For Unfunded Actuarial Accrued Liability		1,415,030,574		
Total			\$	2,598,607,931
Total Actuarial Assets			\$	3,167,611,277
ACTUARIAL LIA	BILITIES		•	
Actuarial Present Value of Future Benefits				
Inactive Members:				
Retired Members and Beneficiaries	\$	805,171,431		
Vested Retirement		56,533,591		
Vested Membership		0		
Total - Inactive			\$	861,705,022
Actuarial Present Value of Future Benefits				
Active Members:			\$	2,305,906,255
Refunds and Expenses Payable			\$	0
Total Actuarial Liabilities			\$	3,167,611,277
Notes				
* Values as of June 30, 2001			1	
Market value of assets:	No	n-Hazardous	\$	396,254,063
iviai ket value ui assets.		zardous		
	-		\$	107,592,284
A atwarial value of acceta.	Tot	aı	\$	503,846,347
Actuarial value of assets:			\$	569,003,346

TABLE IX KENTUCKY EMPLOYEES RETIREMENT SYSTEM ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2001 GASB DISCLOSURE INFORMATION

	Non-Hazardous	Hazardous	
	Position	Position	
	Employees	Employees	Total
	NUMBER OF MEMBER	S	
Inactive Members			
Retired Members	21,440	933	22,373
Beneficiaries	3,678	120	3,798
Vested Retirements	3,312	123	3,435
Vested Membership	13,429	799	14,228
Total Inactive Members	41,859	1,975	43,834
Active Members			
Vested Members	31,020	2,138	33,158
Nonvested Members	16,760	2,090	18,850
Total Active Members	47,780	4,228	52,008
Total Members	89,639	6,203	95,842

TABLE X KENTUCKY EMPLOYEES RETIREMENT SYSTEM ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2001 INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

	INFORM <i>E</i>	TION REQU	IRED	UNDER GASB S	TATE			
				Non-Hazardous		Hazardous		
				Position		Position		
				Employees		Employees		Total
			MBE	R OF MEMBERS	,			
Contracts in Force - Retire	ees and De	•						
(1) Single;	-	100% Paid		4,091		221		4,312
Pre-Medicare	-	75% Paid		232		24		256
	-	50% Paid		219		44		263
	-	25% Paid		118		12		130
	-	0% Paid		539		1		540
(2) Family;	-	100% Paid		391		64		455
Pre-Medicare	-	75% Paid		7		5		12
	-	50% Paid		3		5		8
	-	25% Paid		6		3		9
	-	0% Paid		1		0		1
(3) Parent +;	-	100% Paid		287		33		320
Pre-Medicare	-	75% Paid		6		12		18
	-	50% Paid		7		3		10
	-	25% Paid		2		3		5
	-	0% Paid		44		0		44
(4) Couple;	-	100% Paid		609		72		681
Pre-Medicare	-	75% Paid		20		6		26
	-	50% Paid		17		21		38
	-	25% Paid		13		9		22
	-	0% Paid		3		0		3
(5) Medicare Regular	-	100% Paid		712		35		747
	-	75% Paid		0		0		0
	-	50% Paid		0		0		0
	-	25% Paid		396		17		413
	-	0% Paid		710		0		710
(6) Medicare High	-	100% Paid		5,798		261		6,059
Option	-	75% Paid		1,666		59		1,725
	-	50% Paid		1,227		72		1,299
	-	25% Paid		596		27		623
	-	0% Paid		1,820		1		1,821
Vested Retirements				3,312		123		3,435
Vested Membership				13,429		799		14,228
Active Members				47,780		4,228		52,008
			/I F D I /	CAL BENEFIT OB	ΙIGΔT	IO N		
Medical Benefit Obligation				DEMENTION	 			
Retirees, Beneficiaries ar								
Vested Terminated Me			\$	784,547,826	\$	77,157,196	\$	861,705,022
Active Members				985,035,272		137,293,626		1,122,328,898
Total Medical Benefit Ob	ligation	ŀ	\$	1,769,583,098	\$	214,450,822	\$	1,984,033,920
Net Assets at Actuarial Va			\$	449,630,605	\$	119,372,742	\$	569,003,346
Unfunded Medical Benefit		on	\$	1,319,952,493	\$	95,078,080	\$	1,415,030,574
NOTE: Medical Benefit Ob							_	.,,000,014

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from \$5,120,191,329 on June 30, 2000 to \$5,729,225,055 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from \$(2,022,697,595) to \$(1,477,191,106). Total actuarial value of assets as of June 30, 2001 was equal to \$7,206,420,161. The Unfunded Actuarial Accrued Liability increased from (130.71%) to (89.60%) as a percentage of annual payroll and increased from (39.5%) to (25.8%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from \$1,632,642,971 on June 30, 2000 to \$1,984,033,920 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from \$1,130,870,482 to \$1,415,030,574. Total actuarial value of assets as of June 30, 2001 was equal to \$569,003,346. The Unfunded Actuarial Accrued Liability increased from 69.3% to 71.3% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

The change in contribution rate between the 2000 and 2001 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	Hazardous Position Employees
June 30, 2000 Contribution Rate	5.89%	18.84%
Change in Payment Percentage Due to Covered Payroll		
Experience	0.10%	0.10%
Investment Return Experience		
> Prior to Asset Valuation Method Change	0.06%	0.04%
> Impact of Asset Valuation Method Change	1.05%	0.53%
Salary Increase Experience	0.28%	0.11%
Decrements Experience*	0.02%	(0.06%)
Change in Insurance Fund Rate		
> One-Year Temporary Funding Rate	(0.57%)	(0.78%)
> Increase in Long Term Funding Rate	0.23%	0.39%
Change in Administrative Expense Rate	(0.13%)	(0.13%)
Retiree COLA Effective 7/1/2000	0.19%	0.07%
Legislated Changes		
> 3 Year Average Window for Nonhazardous	0.25%	0.00%
Change in Actuarial Assumptions	0.13%	(0.27%)
Reduction in Amount Available from Prior Year Retirement		
Fund Rate to Offset Current Year Increases	(1.61%)	N/A
June 30, 2001 Contribution Rate	5.89%	18.84%
* Includes mortality, disability, termination of employment and	l retirement experience.	·

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees was determined at 0.34%. An additional 5.55% is required to fund medical insurance for retirees, bringing the required contribution up to 5.89%. This is the same as the current 5.89% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2002 should remain at the 5.89% level, and we so recommend.

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees was determined at 6.57%. An additional 12.27% is required to fund medical insurance for retirees, bringing the required contribution up to 18.84%. This is the same as the current 18.84% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning

July 1, 2002 should remain at the 18.84% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2002 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT FUND										
	Total Actuarial	Unfunded								
	Accrued	Actuarial		Actuarial Value						
July 1 of Year	Liability	Accrued	Percent	of Assets	Increase in					
Shown		Liability	Unfunded		Assets					
1956	\$ 16,200,000	\$ 16,200,000	100.0%	\$ 0	\$ 0					
1961	49,201,024	31,670,465	64.4%	17,530,559	4,479,508					
1966	127,889,238	72,137,125	56.4%	55,752,113	9,085,814					
1971	185,075,453	59,614,477	32.2%	125,460,976*	18,353,116					
1975	296,343,758	77,434,549	26.1%	218,909,209*	26,529,526					
1976	387,214,910	130,838,120	33.8%	256,376,790*	37,467,581					
1977	446,255,236	149,511,331	33.5%	296,743,905*	40,367,115					
1978	507,324,915	168,497,917	33.2%	338,826,998*	42,083,093					
1979	592,095,113	202,676,662	34.2%	389,418,451*	50,591,453					
1980	710,126,703	249,770,835	35.2%	460,355,868*	70,937,417					
1981	692,160,395	164,735,129	23.8%	527,425,266	67,069,398					
1982	810,250,589	195,803,691	24.2%	614,446,898	87,021,632					
1983	862,291,959	152,196,081	17.7%	710,095,878	95,648,980					
1984	1,016,088,830	201,535,007	19.8%	814,553,823	104,457,945					
1985	1,104,429,988	169,949,215	15.4%	934,480,773	119,926,950					
1986	1,245,083,143	166,635,243	13.4%	1,079,353,421	144,872,648					
1987	1,384,259,808	120,259,389	8.7%	1,264,000,419	184,646,998					
1988	1,561,743,738	135,687,336	8.7%	1,426,056,402	162,055,983					
1989	1,734,607,903	145,998,805	8.4%	1,588,609,098	162,552,696					
1990	2,055,489,412	256,167,674	12.5%	1,799,321,738	210,712,640					
1991	2,288,611,147	375,396,216	16.4%	1,913,214,931	113,893,193					
1992**	2,525,190,930	170,708,609	6.8%	2,354,482,321	441,267,390					
1993	2,703,771,076	118,561,539	4.4%	2,585,209,537	230,727,216					
1994	2,912,050,275	183,001,288	6.3%	2,729,048,987	143,839,450					
1995	3,240,852,288	257,038,750	7.9%	2,983,813,538	244,764,551					
1996	3,415,404,483	40,108,906	1.2%	3,375,295,577	391,482,039					
1997	3,603,966,110	(246,746,133)	(6.8%)	3,850,712,243	475,416,666					
1998	3,971,749,822	(596,537,421)	(15.0%)	4,568,287,243	717,575,000					
1999	4,531,905,609	(992,274,107)	(21.9%)	5,524,179,716	955,892,473					
2000	5,120,191,329	(2,022,697,595)	(39.5%)	7,142,888,924	1,618,709,208					
2001***	5,729,229,055	(1,477,191,106)	(25.8%)	7,206,420,161	63,531,237					

^{*}Includes capitalized appreciation of investments.

^{**}Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.

^{***}Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - INSURANCE FUND										
July 1 of Year Shown			Actuarial Value of Assets	Increase in Assets						
1990	\$ 719,493,806	\$ 686,770,874	95.5%	\$ 32,722,932	\$ N/A					
1991	804,674,050	758,124,715	94.2%	46,549,335	13,826,403					
1992	1,001,703,695	939,238,069	93.8%	62,465,626	15,916,291					
1993	1,177,861,283	1,100,187,708	93.4%	77,673,575	15,207,949					
1994	1,444,612,678	1,345,529,145	93.1%	99,083,533	21,409,958					
1995	1,462,174,101	1,334,881,910	91.3%	127,292,191	28,208,658					
1996**	1,222,394,138	1,049,747,933	85.9%	172,646,205	45,354,014					
1997	1,274,464,242	1,063,299,895	83.4%	211,164,347	38,518,142					
1998	1,379,578,155	1,114,866,185	80.8%	264,711,970	53,547,623					
1999	1,422,523,386	1,064,238,850	74.8%	358,284,536	93,572,566					
2000	1,632,642,971	1,130,870,482	69.3%	501,772,489	143,487,953					
2001***	1,984,033,920	1,415,030,574	71.3%	569,003,346	67,230,857					

^{**}Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the Kentucky Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding polices adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A.	Date	
Edward W. Maynard, F.S.A.	Date	

William M. Mercer, Incorporated 462 South Fourth Avenue, Suite 1500 Louisville, Kentucky 40202-3431 (202) 561-4500

^{***}Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

SECTION V STATISTICAL DATA AS OF JUNE 30, 2001

KENTUCKY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

EARNINGS BY AGE GROUPS

AGE		MALE			FEMALE	· • • • • • • •		TOTAL	
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	858	16,520,472	19,255	91	1,536,756	16,887	949	18,057,228	19,028
20-24	1,432	31,304,532	21,861	1,097	19,710,446	17,968	2,529	51,014,978	20,172
25-29	1,446	35,273,198	24,394	2,656	59,307,067	22,329	4,102	94,580,265	23,057
30-34	1,987	57,667,238	29,022	3,248	82,720,424	25,468	5,235	140,387,662	26,817
35-39	2,233	75,641,508	33,874	3,607	100,308,362	27,809	5,840	175,949,870	30,128
40-44	2,696	100,328,858	37,214	4,366	131,174,848	30,045	7,062	231,503,706	32,782
45-49	3,085	124,411,140	40,328	4,801	158,086,052	32,928	7,886	282,497,192	35,823
50-54	2,921	129,174,165	44,223	4,066	137,359,146	33,782	6,987	266,533,311	38,147
55-59	1,846	81,543,708	44,173	2,454	79,344,055	32,333	4,300	160,887,763	37,416
60-64	906	37,979,239	41,920	1,137	35,891,016	31,566	2,043	73,870,255	36,158
65-69	276	12,279,768	44,492	299	8,438,328	28,222	575	20,718,096	36,031
70-74	103	4,420,752	42,920	96	2,580,948	26,885	199	7,001,700	35,184
75+	38	1,244,568	32,752	35	941,940	26,913	73	2,186,508	29,952
TOTAL	19,827	707,789,146	35,698	27,953	817,399,387	29,242	47,780	1,525,188,532	31,921
EARNINGS	BY SERV	ICE GROUPS							
SERVICE		MALE			FEMALE			TOTAL	
SERVICE GROUP	COUNT		AVERAGE	COUNT	FEMALE EARNINGS	 AVERAGE	COUNT	TOTAL EARNINGS	AVERAGE
		' EARNINGS					COUNT 2,874		
GROUP	COUNT	EARNINGS 26,217,535	AVERAGE	COUNT	EARNINGS	AVERAGE		EARNINGS	
GROUP 0 1 2	COUNT 1,332	EARNINGS 26,217,535 54,658,046	AVERAGE 19,683	COUNT 1,542	EARNINGS 27,959,768	AVERAGE 18,132	2,874	EARNINGS 54,177,303	18,851
GROUP 0 1	COUNT 1,332 2,229	EARNINGS 26,217,535 54,658,046 53,557,653	19,683 24,521	1,542 3,275	EARNINGS 27,959,768 68,450,675	AVERAGE 18,132 20,901	2,874 5,504	EARNINGS 54,177,303 123,108,721	18,851 22,367
GROUP 0 1 2	1,332 2,229 2,000	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250	AVERAGE 19,683 24,521 26,779	COUNT 1,542 3,275 2,369	EARNINGS 27,959,768 68,450,675 55,600,315	18,132 20,901 23,470	2,874 5,504 4,369	EARNINGS 54,177,303 123,108,721 109,157,968	18,851 22,367 24,985
GROUP 0 1 2 3	1,332 2,229 2,000 1,151 1,046	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250	19,683 24,521 26,779 29,694	1,542 3,275 2,369 1,457 1,467	EARNINGS 27,959,768 68,450,675 55,600,315 35,715,523	18,132 20,901 23,470 24,513	2,874 5,504 4,369 2,608	EARNINGS 54,177,303 123,108,721 109,157,968 69,892,773	18,851 22,367 24,985 26,799
GROUP 0 1 2 3 4	1,332 2,229 2,000 1,151 1,046	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250 31,577,676	19,683 24,521 26,779 29,694 30,189	1,542 3,275 2,369 1,457 1,467	EARNINGS 27,959,768 68,450,675 55,600,315 35,715,523 36,585,192	18,132 20,901 23,470 24,513 24,939	2,874 5,504 4,369 2,608 2,513	54,177,303 123,108,721 109,157,968 69,892,773 68,162,868	18,851 22,367 24,985 26,799 27,124
GROUP 0 1 2 3 4	1,332 2,229 2,000 1,151 1,046 7,758 3,279	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250 31,577,676	19,683 24,521 26,779 29,694 30,189 25,804	1,542 3,275 2,369 1,457 1,467	EARNINGS 27,959,768 68,450,675 55,600,315 35,715,523 36,585,192 224,311,472	AVERAGE 18,132 20,901 23,470 24,513 24,939 22,187	2,874 5,504 4,369 2,608 2,513	54,177,303 123,108,721 109,157,968 69,892,773 68,162,868 424,499,632	18,851 22,367 24,985 26,799 27,124
GROUP 0 1 2 3 4 0-4 5-9	1,332 2,229 2,000 1,151 1,046 7,758 3,279	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250 31,577,676 200,188,160 109,226,419 108,584,724	19,683 24,521 26,779 29,694 30,189 25,804 33,311	1,542 3,275 2,369 1,457 1,467 10,110 5,309 4,680	EARNINGS 27,959,768 68,450,675 55,600,315 35,715,523 36,585,192 224,311,472 146,590,306	AVERAGE 18,132 20,901 23,470 24,513 24,939 22,187 27,612	2,874 5,504 4,369 2,608 2,513 17,868 8,588	54,177,303 123,108,721 109,157,968 69,892,773 68,162,868 424,499,632 255,816,725	18,851 22,367 24,985 26,799 27,124 23,758 29,788 33,350 37,992
GROUP 0 1 2 3 4 0-4 5-9 10-14	1,332 2,229 2,000 1,151 1,046 7,758 3,279 2,871	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250 31,577,676 200,188,160 109,226,419 108,584,724 86,596,992	19,683 24,521 26,779 29,694 30,189 25,804 33,311 37,821	1,542 3,275 2,369 1,457 1,467 10,110 5,309 4,680	EARNINGS 27,959,768 68,450,675 55,600,315 35,715,523 36,585,192 224,311,472 146,590,306 143,239,602 100,325,556	AVERAGE 18,132 20,901 23,470 24,513 24,939 22,187 27,612 30,607	2,874 5,504 4,369 2,608 2,513 17,868 8,588 7,551	54,177,303 123,108,721 109,157,968 69,892,773 68,162,868 424,499,632 255,816,725 251,824,326 186,922,548 137,200,490	18,851 22,367 24,985 26,799 27,124 23,758 29,788 33,350
GROUP 0 1 2 3 4 0-4 5-9 10-14 15-19	1,332 2,229 2,000 1,151 1,046 7,758 3,279 2,871 2,045	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250 31,577,676 200,188,160 109,226,419 108,584,724 86,596,992 60,142,351 75,381,828	19,683 24,521 26,779 29,694 30,189 25,804 33,311 37,821 42,346 44,190 51,315	1,542 3,275 2,369 1,457 1,467 10,110 5,309 4,680 2,875	EARNINGS 27,959,768 68,450,675 55,600,315 35,715,523 36,585,192 224,311,472 146,590,306 143,239,602 100,325,556 77,058,139 78,185,388	18,132 20,901 23,470 24,513 24,939 22,187 27,612 30,607 34,896 36,246 41,390	2,874 5,504 4,369 2,608 2,513 17,868 8,588 7,551 4,920 3,487 3,358	54,177,303 123,108,721 109,157,968 69,892,773 68,162,868 424,499,632 255,816,725 251,824,326 186,922,548 137,200,490 153,567,216	18,851 22,367 24,985 26,799 27,124 23,758 29,788 33,350 37,992 39,346 45,732
GROUP 0 1 2 3 4 0-4 5-9 10-14 15-19 20-24 25-29 30-34	1,332 2,229 2,000 1,151 1,046 7,758 3,279 2,871 2,045 1,361 1,469	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250 31,577,676 200,188,160 109,226,419 108,584,724 86,596,992 60,142,351 75,381,828 47,655,672	19,683 24,521 26,779 29,694 30,189 25,804 33,311 37,821 42,346 44,190 51,315 61,971	1,542 3,275 2,369 1,457 1,467 10,110 5,309 4,680 2,875 2,126 1,889 757	EARNINGS 27,959,768 68,450,675 55,600,315 35,715,523 36,585,192 224,311,472 146,590,306 143,239,602 100,325,556 77,058,139 78,185,388 36,595,032	AVERAGE 18,132 20,901 23,470 24,513 24,939 22,187 27,612 30,607 34,896 36,246 41,390 48,342	2,874 5,504 4,369 2,608 2,513 17,868 8,588 7,551 4,920 3,487 3,358 1,526	54,177,303 123,108,721 109,157,968 69,892,773 68,162,868 424,499,632 255,816,725 251,824,326 186,922,548 137,200,490 153,567,216 84,250,704	18,851 22,367 24,985 26,799 27,124 23,758 29,788 33,350 37,992 39,346 45,732 55,210
GROUP 0 1 2 3 4 0-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39	7,758 3,279 2,000 1,151 1,046 7,758 3,279 2,871 2,045 1,361 1,469 769	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250 31,577,676 200,188,160 109,226,419 108,584,724 86,596,992 60,142,351 75,381,828 47,655,672 15,094,752	19,683 24,521 26,779 29,694 30,189 25,804 33,311 37,821 42,346 44,190 51,315	1,542 3,275 2,369 1,457 1,467 10,110 5,309 4,680 2,875 2,126 1,889 757 172	EARNINGS 27,959,768 68,450,675 55,600,315 35,715,523 36,585,192 224,311,472 146,590,306 143,239,602 100,325,556 77,058,139 78,185,388 36,595,032 9,056,028	18,132 20,901 23,470 24,513 24,939 22,187 27,612 30,607 34,896 36,246 41,390 48,342 52,651	2,874 5,504 4,369 2,608 2,513 17,868 8,588 7,551 4,920 3,487 3,358 1,526 386	54,177,303 123,108,721 109,157,968 69,892,773 68,162,868 424,499,632 255,816,725 251,824,326 186,922,548 137,200,490 153,567,216 84,250,704 24,150,780	18,851 22,367 24,985 26,799 27,124 23,758 29,788 33,350 37,992 39,346 45,732
GROUP 0 1 2 3 4 0-4 5-9 10-14 15-19 20-24 25-29 30-34	1,332 2,229 2,000 1,151 1,046 7,758 3,279 2,871 2,045 1,361 1,469	EARNINGS 26,217,535 54,658,046 53,557,653 34,177,250 31,577,676 200,188,160 109,226,419 108,584,724 86,596,992 60,142,351 75,381,828 47,655,672 15,094,752	19,683 24,521 26,779 29,694 30,189 25,804 33,311 37,821 42,346 44,190 51,315 61,971	1,542 3,275 2,369 1,457 1,467 10,110 5,309 4,680 2,875 2,126 1,889 757	EARNINGS 27,959,768 68,450,675 55,600,315 35,715,523 36,585,192 224,311,472 146,590,306 143,239,602 100,325,556 77,058,139 78,185,388 36,595,032	AVERAGE 18,132 20,901 23,470 24,513 24,939 22,187 27,612 30,607 34,896 36,246 41,390 48,342	2,874 5,504 4,369 2,608 2,513 17,868 8,588 7,551 4,920 3,487 3,358 1,526	54,177,303 123,108,721 109,157,968 69,892,773 68,162,868 424,499,632 255,816,725 251,824,326 186,922,548 137,200,490 153,567,216 84,250,704	18,851 22,367 24,985 26,799 27,124 23,758 29,788 33,350 37,992 39,346 45,732 55,210

KENTUCKY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

EARNINGS BY AGE GROUPS

AGE GROUP	COUNT	MALE EARNINGS	AVERAGE	COUNT	FEMALE EARNINGS	AVERAGE	COUNT	TOTAL EARNINGS	AVERAGE
0-19	60	894,163	14,903	3	58,104	19,368	63	952,267	15,115
20-24	168	3,148,260	18,740	35	637,920	18,226	203	3,786,180	18,651
25-29	337	7,234,476	21,467	113	2,480,940	21,955	450	9,715,416	21,590
30-34	384	9,370,008	24,401	156	3,663,648	23,485	540	13,033,656	24,136
35-39	399		27,619	160	4,104,156	25,651	559	15,124,272	27,056
40-44	387	11,908,668	30,772	191	5,998,692	31,407	578	17,907,360	30,982
45-49	425	14,221,860	33,463	211	6,634,788	31,444	636	20,856,648	32,793
50-54	505	18,700,344	37,030	162	4,932,132	30,445	667	23,632,476	35,431
55-59	280	10,244,544	36,588	86	2,683,320	31,201	366	12,927,864	35,322
60-64	100	3,473,664	34,737	33	1,076,412	32,619	133	4,550,076	34,211
65-69	21	692,592	32,981	6	217,944	36,324	27	910,536	33,724
70-74	4	159,732	39,933	2	90,924	45,462	6	250,656	41,776
75+	0	0	0	0	0	0	0	0	0
TOTAL	3,070	91,068,427	29,664	1,158	32,578,980	28,134	4,228	123,647,407	29,245
EARNINGS E	SY SERVIC	E GROUPS							
SERVICE		MALE			FEMALE			TOTAL	
SERVICE GROUP	COUNT	MALE EARNINGS	AVERAGE	COUNT	FEMALE EARNINGS	 AVERAGE	COUNT	TOTAL EARNINGS	AVERAGE
				COUNT			COUNT		
GROUP	COUNT	EARNINGS	AVERAGE		EARNINGS	AVERAGE		EARNINGS	AVERAGE
GROUP 0 1 2	COUNT 278	EARNINGS 4,382,383	AVERAGE 15,764	113	EARNINGS 1,991,496	AVERAGE 17,624	391	EARNINGS 6,373,879	AVERAGE
GROUP 0 1	COUNT 278 429	EARNINGS 4,382,383 9,288,276	AVERAGE 15,764 21,651	113 169	EARNINGS 1,991,496 3,769,680	AVERAGE 17,624 22,306	391 598	EARNINGS 6,373,879 13,057,956	AVERAGE 16,301 21,836
GROUP 0 1 2	COUNT 278 429 241	EARNINGS 4,382,383 9,288,276 5,883,360	AVERAGE 15,764 21,651 24,412	113 169 119	EARNINGS 1,991,496 3,769,680 3,033,324	AVERAGE 17,624 22,306 25,490	391 598 360	EARNINGS 6,373,879 13,057,956 8,916,684	AVERAGE 16,301 21,836 24,769
GROUP 0 1 2 3	278 429 241 290	EARNINGS 4,382,383 9,288,276 5,883,360 9,439,380	15,764 21,651 24,412 32,550	113 169 119 91 80	EARNINGS 1,991,496 3,769,680 3,033,324 2,287,200	AVERAGE 17,624 22,306 25,490 25,134	391 598 360 381	EARNINGS 6,373,879 13,057,956 8,916,684 11,726,580	AVERAGE 16,301 21,836 24,769 30,778
GROUP 0 1 2 3 4	278 429 241 290 157	EARNINGS 4,382,383 9,288,276 5,883,360 9,439,380 4,252,404	15,764 21,651 24,412 32,550 27,085	113 169 119 91 80	EARNINGS 1,991,496 3,769,680 3,033,324 2,287,200 2,069,580	AVERAGE 17,624 22,306 25,490 25,134 25,870	391 598 360 381 237	EARNINGS 6,373,879 13,057,956 8,916,684 11,726,580 6,321,984	AVERAGE 16,301 21,836 24,769 30,778 26,675
GROUP 0 1 2 3 4	278 429 241 290 157	EARNINGS 4,382,383 9,288,276 5,883,360 9,439,380 4,252,404 33,245,803	AVERAGE 15,764 21,651 24,412 32,550 27,085 23,832	113 169 119 91 80	EARNINGS 1,991,496 3,769,680 3,033,324 2,287,200 2,069,580 13,151,280	AVERAGE 17,624 22,306 25,490 25,134 25,870 22,992	391 598 360 381 237	EARNINGS 6,373,879 13,057,956 8,916,684 11,726,580 6,321,984 46,397,083	AVERAGE 16,301 21,836 24,769 30,778 26,675 23,588
GROUP 0 1 2 3 4 0-4 5-9	278 429 241 290 157 1,395 544	4,382,383 9,288,276 5,883,360 9,439,380 4,252,404 33,245,803 16,465,812	AVERAGE 15,764 21,651 24,412 32,550 27,085 23,832 30,268	113 169 119 91 80 572 213	EARNINGS 1,991,496 3,769,680 3,033,324 2,287,200 2,069,580 13,151,280 6,171,984	AVERAGE 17,624 22,306 25,490 25,134 25,870 22,992 28,976	391 598 360 381 237 1,967 757	EARNINGS 6,373,879 13,057,956 8,916,684 11,726,580 6,321,984 46,397,083 22,637,796	AVERAGE 16,301 21,836 24,769 30,778 26,675 23,588 29,905
GROUP 0 1 2 3 4 0-4 5-9 10-14	278 429 241 290 157 1,395 544 864	4,382,383 9,288,276 5,883,360 9,439,380 4,252,404 33,245,803 16,465,812 29,965,080	15,764 21,651 24,412 32,550 27,085 23,832 30,268 34,682	113 169 119 91 80 572 213 309	EARNINGS 1,991,496 3,769,680 3,033,324 2,287,200 2,069,580 13,151,280 6,171,984 10,530,924	AVERAGE 17,624 22,306 25,490 25,134 25,870 22,992 28,976 34,081	391 598 360 381 237 1,967 757 1,173	EARNINGS 6,373,879 13,057,956 8,916,684 11,726,580 6,321,984 46,397,083 22,637,796 40,496,004	AVERAGE 16,301 21,836 24,769 30,778 26,675 23,588 29,905 34,523
GROUP 0 1 2 3 4 0-4 5-9 10-14 15-19	278 429 241 290 157 1,395 544 864 179	4,382,383 9,288,276 5,883,360 9,439,380 4,252,404 33,245,803 16,465,812 29,965,080 7,289,772	15,764 21,651 24,412 32,550 27,085 23,832 30,268 34,682 40,725	113 169 119 91 80 572 213 309 41	EARNINGS 1,991,496 3,769,680 3,033,324 2,287,200 2,069,580 13,151,280 6,171,984 10,530,924 1,747,224	AVERAGE 17,624 22,306 25,490 25,134 25,870 22,992 28,976 34,081 42,615	391 598 360 381 237 1,967 757 1,173 220 73 32	EARNINGS 6,373,879 13,057,956 8,916,684 11,726,580 6,321,984 46,397,083 22,637,796 40,496,004 9,036,996	AVERAGE 16,301 21,836 24,769 30,778 26,675 23,588 29,905 34,523 41,077
GROUP 0 1 2 3 4 0-4 5-9 10-14 15-19 20-24	278 429 241 290 157 1,395 544 864 179 50	4,382,383 9,288,276 5,883,360 9,439,380 4,252,404 33,245,803 16,465,812 29,965,080 7,289,772 2,187,672	15,764 21,651 24,412 32,550 27,085 23,832 30,268 34,682 40,725 43,753	113 169 119 91 80 572 213 309 41 23	EARNINGS 1,991,496 3,769,680 3,033,324 2,287,200 2,069,580 13,151,280 6,171,984 10,530,924 1,747,224 977,568	AVERAGE 17,624 22,306 25,490 25,134 25,870 22,992 28,976 34,081 42,615 42,503	391 598 360 381 237 1,967 757 1,173 220 73	EARNINGS 6,373,879 13,057,956 8,916,684 11,726,580 6,321,984 46,397,083 22,637,796 40,496,004 9,036,996 3,165,240	AVERAGE 16,301 21,836 24,769 30,778 26,675 23,588 29,905 34,523 41,077 43,359
GROUP 0 1 2 3 4 0-4 5-9 10-14 15-19 20-24 25-29	278 429 241 290 157 1,395 544 864 179 50 32	4,382,383 9,288,276 5,883,360 9,439,380 4,252,404 33,245,803 16,465,812 29,965,080 7,289,772 2,187,672 1,600,368	15,764 21,651 24,412 32,550 27,085 23,832 30,268 34,682 40,725 43,753 50,012	113 169 119 91 80 572 213 309 41 23 0	EARNINGS 1,991,496 3,769,680 3,033,324 2,287,200 2,069,580 13,151,280 6,171,984 10,530,924 1,747,224 977,568 0	AVERAGE 17,624 22,306 25,490 25,134 25,870 22,992 28,976 34,081 42,615 42,503 0	391 598 360 381 237 1,967 757 1,173 220 73 32	EARNINGS 6,373,879 13,057,956 8,916,684 11,726,580 6,321,984 46,397,083 22,637,796 40,496,004 9,036,996 3,165,240 1,600,368	AVERAGE 16,301 21,836 24,769 30,778 26,675 23,588 29,905 34,523 41,077 43,359 50,012
GROUP 0 1 2 3 4 0-4 5-9 10-14 15-19 20-24 25-29 30-34	278 429 241 290 157 1,395 544 864 179 50 32 5	4,382,383 9,288,276 5,883,360 9,439,380 4,252,404 33,245,803 16,465,812 29,965,080 7,289,772 2,187,672 1,600,368 239,064	15,764 21,651 24,412 32,550 27,085 23,832 30,268 34,682 40,725 43,753 50,012 47,813	113 169 119 91 80 572 213 309 41 23 0	EARNINGS 1,991,496 3,769,680 3,033,324 2,287,200 2,069,580 13,151,280 6,171,984 10,530,924 1,747,224 977,568 0 0	AVERAGE 17,624 22,306 25,490 25,134 25,870 22,992 28,976 34,081 42,615 42,503 0 0	391 598 360 381 237 1,967 757 1,173 220 73 32 5	EARNINGS 6,373,879 13,057,956 8,916,684 11,726,580 6,321,984 46,397,083 22,637,796 40,496,004 9,036,996 3,165,240 1,600,368 239,064	AVERAGE 16,301 21,836 24,769 30,778 26,675 23,588 29,905 34,523 41,077 43,359 50,012 47,813

KENTUCKY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE AGE		ROUP							SERVIC	CE
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	849	6	1	1	1					858
20-24	1,347	84	1							1,432
25-29	1,152	284	10	1 -						1,446
30-34 35-39	1,057 773	623	292	15	27					1,987
40-44	773	495 427	625 539	313 563	352	85				2,233 2,696
45-49	690	444	474	423	402	527	125			3,085
50-54	602	376	386	339	282	491	379	66		2,921
55-59	352	292	277	205	162	242	188	106	22	1,846
60-64	144	159	173	125	105	94	56	33	17	906
65-69	35	59	62	39	20	21	15	7	18	276
70-74 75+	20	20	27	17	7 3	4 5	4 2	1 1	3	103
TOTAL	7 7,758	10 3,279	4 2,871	5 2,045		1,469	769	214	1 61	38 19,827
IOIAL	7,730	3,419	2,071	2,043	1,301	1,409	709	214	01	19,021
FEMALE AGE									SERVIC	Œ
GROUP	G1 0-4	ROUP 5-9	10-14		20-24	25-29	30-34	35-39	40+	TOTAL
0-19	89	5-9	10-14	13-19	20-24 1	25-29	30-34	33-39	40+	91
20-24	1,057	36			2	1	1			1,097
25-29	2,155	467	34							2,656
30-34	1,654	1,044	514	36						3,248
35-39	1,347	835	914	453	57	1				3,607
40-44	1,320	865	807	635	569	170	1 77			4,366
45-49 50-54	1,096 795	809 642	799 767	584 531	600 413	736 496	177 370	52		4,801 4,066
55-59	416	375	486	365	267	300	141	92	12	2,454
60-64	132	168	251	202	152	146	50	19	17	1,137
65-69	32	50	83	49	42	25	12	4	2	299
70-74	9	16	17	17	16	9	5	4	3	96
75+	8	2	8	3	7	4	1	1	1	35
TOTAL	10,110	5,309	4,680	2,875	2,126	1,889	757	172	35	27,953
TOTAL AGE									SERVIC	Œ
GROUP	G1 0-4	ROUP 5-9	10-14	 15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	938	6	10-14	15-19	20-24	25-29	30-34	33-39	40+	949
20-24	2,404	120	1	_	2	1	1			2,529
25-29	3,307	751	44							4,102
30-34	2,711	1,667	806	51						5,235
35-39	2,120	1,330	1,539	766	84	1				5,840
40-44	2,050	1,292	1,346	1,198	921	255	200			7,062
45-49 50-54	1,786 1,397	1,253 1,018	1,273 1,153	1,007 870	1,002 695	1,263 987	302 749	118		7,886 6,987
55-59	768	667	763	570	429	542	329	198	34	4,300
60-64	276	327	424	327	257	240	106	52	34	2,043
65-69	67	109	145	88	62	46	27	11	20	575
70-74	29	36	44	34	23	13	9	5	6	199
75+	15	12	12	8	10	9	1 506	2	2	73
TOTAL	17,868	8,588	7,551	4,920	3,487	3,358	1,526	386	96	47,780

KENTUCKY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE AGE	CRO								SERVIC	E
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	59	1								60
20-24	161	6	1							168
25-29	288	48	1							337
30-34	211	133	40							384
35-39	170	85	123	21						399
40-44	137	66	138	36	10	_				387
45-49 50-54	136	67	157	42	18	5	2			425
55-59	130 75	64 48	223 125	53 18	15 6	18 6	2 2			505 280
60-64	25	22	39	8	1	3	1	1		100
65-69	2	4	14	1	_	5	_	_		21
70-74	1	-	3	_						4
75+										0
TOTAL	1,395	544	864	179	50	32	5	1	0	3,070
FEMALE AGE									SERVIC	E
	GRO	OUP								
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3									3
20-24	33	2								35
25-29 30-34	99	14	2.2							113
35-39	101 81	32 30	23 44	4	1					156 160
40-44	75	40	48	14	14					191
45-49	86	42	63	13	7					211
50-54	60	32	60	9	1					162
55-59	25	14	46	1						86
60-64	7	6	20							33
65-69	2	1	3							6
70-74			2							2
75+						_	_	_		0
TOTAL	572	213	309	41	23	0	0	0	0	1,158
TOTAL AGE	· · · · · · · · · · · · · · · · · · ·	• • • • • • •							SERVIC	E
GROUP	0-4	OUP 5-9	10-14	 15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	62	1	10 11	10 10	20 21	23 25	30 31	33 37	10.	63
20-24	194	8	1							203
25-29	387	62	1							450
30-34	312	165	63							540
35-39	251	115	167	25	1					559
40-44	212	106	186	50	24					578
45-49	222	109	220	55	25	5				636
50-54	190	96	283	62	16	18	2			667
55-59 60-64	100	62	171	19	6 1	6	2 1	1		366
60-64 65-69	32 4	28 5	59 17	8 1	1	3	Τ	1		133 27
70-74	1	5	1 / 5	Т						6
75+	Τ.		J							0
TOTAL	1,967	757	1,173	220	73	32	5	1	0	4,228

KENTUCKY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE									SERVI	CE
GROUP	0-4	GROUP 5-9		15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19					2 52,434					949 19,028
20-24	2,404 19,907	120 24,527	1 26,556		2 48,636	1 47,172	1 45,396			2,529 20,172
25-29	3,307 22,354	751 25,854								4,102 23,057
30-34	2,711 23,994	1,667 29,240								5,235 26,817
35-39	2,120 24,942				84 35,422					5,840 30,128
40-44	2,050 25,438				921 38,228					7,062 32,782
45-49	1,786 25,905	1,253 30,646	1,273 34,132	1,007 39,004	1,002 41,678	1,263 45,399	302 52,997			7,886 35,823
50-54							749 56,461			6,987 38,147
55-59							329 55,428			
60-64							106 52,676			
65-69							27 55,453		20 77,582	
70-74	29 26,928	36 27,777	44 33,462	34 32,496	23 41,749	13 38,560	9 50,291	5 57,626	6 73,556	199 35,184
75+	15 26,509		12 25,884	8 25,790	10 25,327	9 39,427			2 60,816	73 29,952
TOTAL	17,868 23,758	8,588 29,788	7,551 33,350	4,920 37,992	3,487 39,346	3,358 45,732		386 62,567	96 72,460	47,780 31,921
TOTAL EAF AVERAGE S	SERVICE	1,525,	188,532 42.45 10.37				Note: Eamatrix have not 401(a)(1			this

KENTUCKY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE		 GROUP							SERVI	CE
GROUP				15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	62 14,944	1 25,728								63 15,115
20-24	194 18,428	8 23,678								203 18,651
25-29	387 20,840	62 26,156								450 21,590
30-34	312 21,323	165 27,106								540 24,136
35-39	251 23,452			25 36,143						559 27,056
40-44	212 25,885			50 37,409						578 30,982
45-49	222 27,208	109 31,399			25 43,272					636 32,793
50-54	190 29,543	96 33,541					2 41,754			667 35,431
55-59	100 30,454						2 51,450			366 35,322
60-64							1 52,656			133 34,211
65-69	4 19,506	5 40,476								27 33,724
	1 33,276		5 43,476							6 41,776
75+										0
TOTAL	1,967 23,588	757 29,905	1,173 34,523	220 41,077	73 43,359		5 47,813		0	4,228 29,245
TOTAL EAR AVERAGE S AVERAGE A	SERVICE	123,	647,407 41.62 6.57				matrix	arnings sh been limi 7).		this

KENTUCKY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION TABULATION BY MONTHLY SALARY JUNE 30, 2001

	NUMBER OF MEMBERS				
MONTHLY SALARY	MALES	<u>FEMALES</u>	TOTAL		
UNDER \$ 500	122	91	213		
\$ 500 - \$ 749	106	143	249		
\$ 750 - \$ 999	249	540	789		
\$ 1,000 - \$ 1,249	757	1,582	2,339		
\$ 1,250 - \$ 1,499	1,692	2,706	4,398		
\$ 1,500 - \$ 1,749	1,829	3,255	5,084		
\$ 1,750 - \$ 1,999	1,719	3,070	4,789		
\$ 2,000 - \$ 2,249	1,665	3,262	4,927		
\$ 2,250 - \$ 2,499	1,502	2,662	4,164		
\$ 2,500 - \$ 2,749	1,387	2,072	3,459		
\$ 2,750 - \$ 2,999	1,234	1,879	3,113		
\$ 3,000 - \$ 3,499	1,939	2,598	4,537		
\$ 3,500 - \$ 3,999	1,461	1,619	3,080		
\$ 4,000 - \$ 4,499	1,085	956	2,041		
\$ 4,500 - \$ 4,999	825	607	1,432		
\$ 5,000 - \$ 5,499	599	373	972		
\$ 5,500 - \$ 5,999	496	218	714		
\$ 6,000 - \$ 6,499	331	110	441		
\$ 6,500 - \$ 6,999	219	74	293		
\$ 7,000 - \$ 7,499	197	47	244		
\$ 7,500 - \$ 7,999	105	21	126		
\$ 8,000 - \$ 8,499	100	21	121		
\$ 8,500 - \$ 8,999	59	11	70		
\$ 9,000 - \$ 9,499	25	5	30		
\$ 9,500 - \$ 9,999	21	8	29		
\$ 10,000 AND OVER	103	23	126		
TOTAL	19,827	27,953	47,780		
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF \$85,000 AND OVER	572	123	695		

KENTUCKY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION TABULATION BY MONTHLY SALARY JUNE 30, 2001

	NUMBER OF MEMBERS				
MONTHLY SALARY	MALES	FEMALES	TOTAL		
UNDER \$ 500	31	6	37		
\$ 500 - \$ 749	8	2	10		
\$ 750 - \$ 999	42	22	64		
\$ 1,000 - \$ 1,249	51	28	79		
\$ 1,250 - \$ 1,499	186	65	251		
\$ 1,500 - \$ 1,749	405	200	605		
\$ 1,750 - \$ 1,999	431	189	620		
\$ 2,000 - \$ 2,249	429	148	577		
\$ 2,250 - \$ 2,499	287	102	389		
\$ 2,500 - \$ 2,749	292	94	386		
\$ 2,750 - \$ 2,999	208	81	289		
\$ 3,000 - \$ 3,499	301	96	397		
\$ 3,500 - \$ 3,999	153	67	220		
\$ 4,000 - \$ 4,499	109	22	131		
\$ 4,500 - \$ 4,999	48	18	66		
\$ 5,000 - \$ 5,499	29	7	36		
\$ 5,500 - \$ 5,999	23	4	27		
\$ 6,000 - \$ 6,499	15	3	18		
\$ 6,500 - \$ 6,999	6	2	8		
\$ 7,000 - \$ 7,499	2	0	2		
\$ 7,500 - \$ 7,999	2	0	2		
\$ 8,000 - \$ 8,499	0	0	0		
\$ 8,500 - \$ 8,999	1	0	1		
\$ 9,000 - \$ 9,499	3	0	3		
\$ 9,500 - \$ 9,999	1	0	1		
\$ 10,000 AND OVER	7	2	9		
TOTAL	3,070	1,158	4,228		
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF \$85,000 AND OVER	15	2	17		

KENTUCKY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION MEMBERS WITH SERVICE IN ANOTHER SYSTEM JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN KERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - HAZARDOUS	0	344	344
CERS - NONHAZARDOUS	542	2,358	2,900
CERS - HAZARDOUS	22	73	95
STATE POLICE	0	13	13
TOTAL - ALL SYSTEMS	564	2,788	3,352
MEMB	ERS CURRENTLY NOT ACTIVE	IN KERS NONHAZARDOUS	
SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - HAZARDOUS	1,606	51	1,657
CERS - NONHAZARDOUS	2,028	209	2,237
CERS - HAZARDOUS	279	29	308
STATE POLICE	109	9	118
TOTAL - ALL SYSTEMS	4,022	298	4,320

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION MEMBERS WITH SERVICE IN ANOTHER SYSTEM JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN KERS HAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	0	1,606	1,606
CERS - NONHAZARDOUS	21	216	237
CERS - HAZARDOUS	11	33	44
STATE POLICE	1	7	8
TOTAL - ALL SYSTEMS	33	1,862	1,895
MEN	MBERS CURRENTLY NOT ACTIV	VE IN KERS HAZARDOUS	
SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	344	51	395
CERS - NONHAZARDOUS	55	58	113
CERS - HAZARDOUS	108	5	113
STATE POLICE	20	1	21
TOTAL - ALL SYSTEMS	527	115	642

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION RETIRED LIVES SUMMARY JUNE 30, 2001

	MALE LIVES		FE	MALE LIVES	TOTAL		
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	
BASIC FORM	2,424	2,288,742.89	5,965	4,907,621.10	8,389	7,196,363.99	
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00	
JOINT & SURVIVOR							
100% TO BENEFICIARY	1,658	1,568,516.05	540	332,839.92	2,198	1,901,355.97	
66-2/3% TO BENEFICIARY	683	1,056,366.56	174	204,844.31	857	1,261,210.87	
50% TO BENEFICIARY	859	1,160,224.57	545	697,936.35	1,404	1,858,160.92	
POP-UP OPTION	1,565	2,166,629.95	868	1,057,130.33	2,433	3,223,760.28	
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00	
10 YEARS CERTAIN & LIFE	1,100	876,392.79	1,473	1,218,820.42	2,573	2,095,213.21	
SOCIAL SECURITY OPTION							
OPTION C	379	608,226.14	855	1,110,990.08	1,234	1,719,216.22	
OPTION D	781	1,152,484.56	440	580,213.86	1,221	1,732,698.42	
OPTION E	0	0.00	0	0.00	0	0.00	
OPTION F	0	0.00	0	0.00	0	0.00	
DEPENDENT CHILD	0	0.00	1	188.76	1	188.76	
REFUND	0	0.00	0	0.00	0	0.00	
15 YEARS CERTAIN & LIFE	362	364,149.64	285	258,731.28	647	622,880.92	
20 YEARS CERTAIN & LIFE	247	295,755.32	236	257,726.07	483	553,481.39	
5 YEARS ONLY	0	0.00	0	0.00	0	0.00	
TOTAL	10,058	11,537,488.47	11,382	10,627,042.48	21,440	22,164,530.95	

KENTUCKY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION RETIRED LIVES SUMMARY JUNE 30, 2001

	MALE LIVES		FEN	MALE LIVES	TOTAL		
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	
BASIC FORM	149	100,814.75	101	51,163.88	250	151,978.63	
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00	
JOINT & SURVIVOR							
100% TO BENEFICIARY	103	67,906.28	4	3,426.95	107	71,333.23	
66-2/3% TO BENEFICIARY	37	30,796.55	5	3,880.64	42	34,677.19	
50% TO BENEFICIARY	49	43,550.80	5	6,367.98	54	49,918.78	
POP-UP OPTION	161	131,870.23	24	16,087.43	185	147,957.66	
10 YEARS CERTAIN	16	12,247.76	5	3,146.96	21	15,394.72	
10 YEARS CERTAIN & LIFE	64	36,254.87	23	12,733.68	87	48,988.55	
SOCIAL SECURITY OPTION							
OPTION C	27	20,191.71	15	9,027.46	42	29,219.17	
OPTION D	68	67,955.51	10	4,461.19	78	72,416.70	
OPTION E	0	0.00	0	0.00	0	0.00	
OPTION F	0	0.00	0	0.00	0	0.00	
DEPENDENT CHILD	8	1,841.55	10	2,127.82	18	3,969.37	
REFUND	0	0.00	0	0.00	0	0.00	
15 YEARS CERTAIN & LIFE	20	13,997.01	6	4,657.73	26	18,654.74	
20 YEARS CERTAIN & LIFE	22	17,368.88	1	407.10	23	17,775.98	
5 YEARS ONLY	0	0.00	0	0.00	0	0.00	
TOTAL	724	544,795.90	209	117,488.82	933	662,284.72	

KENTUCKY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION BENEFICIARY SUMMARY JUNE 30, 2001

	MALE LIVES		FEN	MALE LIVES	TOTAL		
	NUMBER	MO NTHLY BENEFITS	NUMBER	MO NTHLY BENEFITS	NUMBER	MO NTHLY BENEFITS	
BASIC FORM	0	0.00	0	0.00	0	0.00	
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00	
JOINT & SURVIVOR							
100% TO BENEFICIARY	242	131,433.16	1,669	926,331.14	1,911	1,057,764.30	
66-2/3% TO BENEFICIARY	16	8,162.48	255	133,930.48	271	142,092.96	
50% TO BENEFICIARY	52	22,529.97	492	176,447.17	544	198,977.14	
POP-UP OPTION	35	30,918.93	150	107,724.47	185	138,643.40	
10 YEARS CERTAIN	77	59,873.24	65	53,095.53	142	112,968.77	
10 YEARS CERTAIN & LIFE	61	39,572.25	82	68,826.22	143	108,398.47	
SOCIAL SECURITY OPTION							
OPTION C	0	0.00	0	0.00	0	0.00	
OPTION D	19	15,460.80	124	139,374.22	143	154,835.02	
OPTION E	0	0.00	0	0.00	0	0.00	
OPTION F	0	0.00	17	6,871.86	17	6,871.86	
DEPENDENT CHILD	0	0.00	0	0.00	0	0.00	
REFUND	0	0.00	0	0.00	0	0.00	
15 YEARS CERTAIN & LIFE	26	21,505.88	96	71,426.47	122	92,932.35	
20 YEARS CERTAIN & LIFE	29	25,267.64	47	40,373.54	76	65,641.18	
5 YEARS ONLY	75	61,808.82	49	63,232.97	124	125,041.79	
TOTAL	632	416,533.17	3,046	1,787,634.07	3,678	2,204,167.24	

KENTUCKY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION BENEFICIARY SUMMARY JUNE 30, 2001

	MALE LIVES		FEN	MALE LIVES	TOTAL		
	NUMBER	MO NTHLY BENEFITS	NUMBER	MO NTHLY BENEFITS	NUMBER	MO NTHLY BENEFITS	
BASIC FORM	0	0.00	0	0.00	0	0.00	
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00	
JOINT & SURVIVOR							
100% TO BENEFICIARY	5	1,601.55	50	29,931.87	55	31,533.42	
66-2/3% TO BENEFICIARY	0	0.00	4	2,248.66	4	2,248.66	
50% TO BENEFICIARY	0	0.00	8	2,298.69	8	2,298.69	
POP-UP OPTION	0	0.00	9	3,137.99	9	3,137.99	
10 YEARS CERTAIN	5	2,898.16	4	1,136.25	9	4,034.41	
10 YEARS CERTAIN & LIFE	2	2,018.46	8	1,018.66	10	3,037.12	
SOCIAL SECURITY OPTION							
OPTION C	0	0.00	0	0.00	0	0.00	
OPTION D	1	17.11	7	6,474.01	8	6,491.12	
OPTION E	0	0.00	0	0.00	0	0.00	
OPTION F	0	0.00	0	0.00	0	0.00	
DEPENDENT CHILD	2	563.16	0	0.00	2	563.16	
REFUND	0	0.00	0	0.00	0	0.00	
15 YEARS CERTAIN & LIFE	1	161.73	0	0.00	1	161.73	
20 YEARS CERTAIN & LIFE	0	0.00	4	908.62	4	908.62	
5 YEARS ONLY	8	1,909.85	2	1,696.59	10	3,606.44	
TOTAL	24	9,170.02	96	48,851.34	120	58,021.36	

KENTUCKY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION VESTED RETIREMENT SUMMARY JUNE 30, 2001

	M	ALE LIVES	FEN	MALE LIVES	TOTAL		
AGE NEAREST BIRTHDAY	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	
15-19	0	0.00	0	0.00	0	0.00	
20-24	5	835.70	3	389.22	8	1,224.92	
25-29	26	4,525.08	45	7,657.19	71	12,182.27	
30-34	87	19,948.47	253	55,877.87	340	75,826.34	
35-39	160	50,805.96	353	99,359.55	513	150,165.51	
40-44	177	62,627.69	340	107,286.25	517	169,913.94	
45-49	209	99,299.13	448	172,481.56	657	271,780.69	
50-54	251	113,721.30	432	157,703.94	683	271,425.24	
55-59	134	78,244.48	212	70,473.46	346	148,717.94	
60-64	48	22,958.69	81	22,904.66	129	45,863.35	
65-69	7	1,613.72	21	3,816.54	28	5,430.26	
70-74	6	6,125.43	7	1,257.91	13	7,383.34	
75-79	1	67.72	4	1,045.85	5	1,113.57	
80-84	1	114.18	1	66.18	2	180.36	
85 +	0	0.00	0	0.00	0	0.00	
TOTAL	1,112	460,887.55	2,200	700,320.18	3,312	1,161,207.73	

KENTUCKY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION VESTED RETIREMENT SUMMARY JUNE 30, 2001

	MALE LIVES		FEN	MALE LIVES	TOTAL	
AGE NEAREST BIRTHDAY	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	3	446.26	0	0.00	3	446.26
30-34	13	2,898.94	5	1,048.31	18	3,947.25
35-39	16	6,200.49	8	2,418.28	24	8,618.77
40-44	14	5,850.58	7	2,165.13	21	8,015.71
45-49	13	3,840.75	6	1,421.15	19	5,261.90
50-54	17	5,179.96	8	1,895.71	25	7,075.67
55-59	4	698.18	5	955.25	9	1,653.43
60-64	2	515.84	1	462.17	3	978.01
65-69	0	0.00	1	11.58	1	11.58
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	82	25,631.00	41	10,377.58	123	36,008.58

KENTUCKY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION VESTED MEMBERSHIP SUMMARY JUNE 30, 2001

	MALE LIVES		F	FEMALE LIVES		TOTAL	
AGE NEAREST		ACCUMULATED		ACCUMULATED	-	ACCUMULATED	
BIRTHDAY	NUMBER	CONTRIBUTIONS	NUMBER	CONTRIBUTIONS	NUMBER	CONTRIBUTIONS	
15-19	1,106	201,314.07	74	17,018.53	1,180	218,332.60	
20-24	388	386,810.26	386	179,714.03	774	566,524.29	
25-29	645	492,130.33	1,131	1,001,727.04	1,776	1,493,857.37	
30-34	761	701,314.30	1,270	1,528,377.85	2,031	2,229,692.15	
35-39	638	657,758.60	1,014	1,180,250.56	1,652	1,838,009.16	
40-44	545	690,588.68	942	1,048,112.09	1,487	1,738,700.77	
45-49	599	741,458.05	948	1,449,656.41	1,547	2,191,114.46	
50-54	606	966,230.63	756	1,450,332.75	1,362	2,416,563.38	
55-59	327	612,879.66	444	934,974.16	771	1,547,853.82	
60-64	200	414,290.01	249	415,437.58	449	829,727.59	
65-69	115	122,378.46	94	70,100.88	209	192,479.34	
70-74	61	37,746.13	47	30,866.27	108	68,612.40	
75-79	31	12,888.46	21	10,166.41	52	23,054.87	
80-84	10	4,612.97	10	4,532.82	20	9,145.79	
85 +	7	1,090.58	4	1,095.63	11	2,186.21	
TOTAL	6,039	6,043,491.19	7,390	9,322,363.01	13,429	15,365,854.20	

KENTUCKY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION VESTED MEMBERSHIP SUMMARY JUNE 30, 2001

	MALE LIVES		F	FEMALE LIVES		TOTAL	
AGE NEAREST BIRTHDAY	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS	
15-19	97	16,650.50	0	0.00	97	16,650.50	
20-24	34	22,989.56	11	7,737.06	45	30,726.62	
25-29	107	73,482.01	37	37,607.40	144	111,089.41	
30-34	126	119,481.11	30	30,991.38	156	150,472.49	
35-39	72	57,537.19	39	64,781.17	111	122,318.36	
40-44	41	42,142.92	33	57,937.93	74	100,080.85	
45-49	46	33,120.63	19	26,728.11	65	59,848.74	
50-54	37	49,073.26	17	23,851.09	54	72,924.35	
55-59	20	14,706.93	14	22,095.37	34	36,802.30	
60-64	13	15,959.49	3	5,078.32	16	21,037.81	
65-69	2	1,335.55	0	0.00	2	1,335.55	
70-74	1	211.92	0	0.00	1	211.92	
75-79	0	0.00	0	0.00	0	0.00	
80-84	0	0.00	0	0.00	0	0.00	
85 +	0	0.00	0	0.00	0	0.00	
TOTAL	596	446,691.07	203	276,807.83	799	723,498.90	

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the Kentucky Employees Retirement System in July, 1956. The plan benefits have been improved several times, most recently as of August 1, 2001.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years for nonhazardous positions. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used. For a member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years.

For hazardous positions, final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

- (a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1956. In some instances prior service credit is granted for time spent in the military.
- (b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1956. Current service credit may be granted for military service and educational leaves if special criteria are met.
- (c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

Any state department, board, or agency shall participate in the System when directed to do so by the Executive Order of the Governor. Membership in the system consists of:

(a) all persons who become employees of a department after such department first participates,

- (b) all persons who are employees on the date a department first participates and who elect within thirty days to become members and make contributions,
- (c) all persons who are employees of any credit union whose membership is limited to state government employees,
- (d) all persons who were professional staff employees of the Council on Public Higher Education or the Higher Education Assistance Authority and were making contributions to the system on the effective date of their respective Executive Order and filed a written election to continue in the System,
- (e) all persons who were professional staff employees of the Kentucky Authority for Educational Television on or after July 1, 1974,
- (f) members of the General Assembly and Constitutional officers of the General Assembly serving during the January, 1960 session or thereafter, and
- (g) officers and employees of the General Assembly and their assistants if employed by the General Assembly during the January, 1960 session and thereafter, but only after serving during six sessions of the General Assembly.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 1.97% of the member's final compensation multiplied by his service will be payable. However, effective February 1, 1999, a member who was participating as of January 1, 1998 and continues to participate through January 1, 1999 shall receive a benefit based on a 2.00% formula rate. In addition, any such member whose effective date of retirement is between February 1, 1999 and January 31, 2009, and who has at least 20 years of service credit, shall receive a retirement allowance based on a 2.20% benefit formula rate. For hazardous positions, a monthly benefit equal to 2.49% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months

are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Minimum Benefit

The normal retirement benefit for members with 10 or more years of service, at least one of which is current service, shall not be less than \$512 per year.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for hazardous members). For non-hazardous position employees with 25 or more years of service credit, additional years of service credit will be added up to a maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a \$5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of \$10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.49% rather than 1.97%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of \$5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (8% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contract provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

FORTY-SECOND ANNUAL ACTUARIAL VALUATION JUNE 30, 2001 COUNTY EMPLOYEES RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the forty-second annual actuarial valuation of the County Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2001.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "level-percentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased each year by the percentage amount necessary to

raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System (with the exception of the rate of retirement). The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for the Retirement Fund and Insurance Fund:

- 1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.
- 2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.
- 3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.
- 4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.
- 5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREME	NT FUND	INSURAN	CE FUND
	Non		Non	
	Hazardous	Hazardous	Hazardous	Hazardous
June 30, 2000 Valuation Assets	5,284,033,534	1,445,542,794	319,642,694	168,659,912
Cash Flows				
> Employer Contributions	48,860,438	20,737,235	62,292,385	32,149,432
> Member Contributions	99,525,931	29,155,004		
> Retirement Benefits	170,256,139	56,519,865		
> Net Refunds	8,245,737	1,285,134		
> Insurance Premiums			27,523,966	11,511,058
> Administrative Expenses	6,174,091	512,265	244,142	108,621
> Investment Manager Fees	1,654,941	464,491	28,832	15,314
Valuation Interest Assumption	8.25%	8.25%	8.25%	8.25%
Expected Return on Valuation Assets				
Reflecting Actual Cash Flows *	434,367,554	118,890,588	27,793,459	14,760,663
Expected Valuation Assets	5,680,456,549	1,555,543,866	381,931,598	203,935,014
Actual Market Value of Assets	4,397,346,547	1,211,154,618	331,066,746	173,636,191
Investment Gain/(Loss)	(1,283,110,002)	(344,389,248)	(50,864,852)	(30,298,823)
Amortization Amounts From Prior	(1,203,110,002)	(344,307,240)	(50,004,032)	(30,270,023)
Valuations				
> Valuation Year - 1				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 2	IV/A	IV/A	IV/A	11/A
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A N/A	N/A N/A	N/A N/A	N/A N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 3	IV/A	IV/A	IV/A	IV/A
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A N/A	N/A N/A	N/A N/A	N/A
>> Amortization	N/A N/A	N/A N/A	N/A N/A	N/A
	IN/A	IN/A	IN/A	IN/A
> Valuation Year - 4	NI/A	NI/A	NI/A	NT/A
>> Initial Amount >> Current Valuation Amount	N/A N/A	N/A N/A	N/A N/A	N/A N/A
>> Current Valuation Amount >> Amortization	N/A N/A	N/A N/A	N/A N/A	N/A N/A
	IN/A	IN/A	IN/A	IN/A
Unamortized Amount of Gain/(Loss)	0	0	0	0
From Prior Valuations	0	0	0	0
Investment Gain/(Loss) to be Amortized				
from Current Valuation Date	(1.202.110.002)	(244 200 240)	(50.064.050)	(20, 200, 022)
> Amount	(1,283,110,002)	(344,389,248)	(50,864,852)	(30,298,823)
> Amortization	(256,622,000)	(68,877,850)	(10,172,970)	(6,059,765)
June 30, 2001 Valuation Assets			204.024.75	
> Expected Assets	5,680,456,549	1,555,543,866	381,931,598	203,935,014
> Amortization Amounts	(256,622,000)	(68,877,850)	(10,172,970)	(6,059,765)
> Valuation Assets	5,423,834,549	1,486,666,016	371,758,628	197,875,249

^{*} Cash flows are assumed equally spread throughout the year.

A. <u>STATEMENT OF ACTUARIAL ASSUMPTIONS</u>

- (1) Mortality:
 - (a) Active & retired lives 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005

per year for hazardous duty employees.

- (b) Disabled lives
- Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).

(2) Disablement

- Graduated rates based on 2000 experience study (no change from 1995 experience study).
- (3) Termination of employment #
- Graduated select (non-hazardous only) and ultimate rates based on 2000 experience study.

(4) Retirement #

- Non-Hazardous:

Age	Retirement Rate
55-57	.04
58-59	.05
60-61	.06
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 and Ov	er 1.00

At age 55-64 in lieu of the age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits.

<u>Hazardous</u>: Assumed that 60% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.

(5) Marital status

(a) Percentage married - 100%.

(b) Age difference - Males are assumed to be 3 years older than their spouses.

(6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed

that the employee is survived by 2 dependent children each age 6.

(7) Investment return - 8.25% per year, net of investment related

expenses, compounded annually.

(8) Compensation progression # - 1st year: 12.00%

2nd year: 10.00% 3rd year: 8.00%

Thereafter: 6.50%, compounded annually.

(9) Underlying Inflation Rate - 3.5% per year; reflected in investment

return and compensation progression

assumptions.

(10) Retiree Medical Insurance #

- It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

	Rate in Effect
Plan Type	on Valuation Date
Single	
- Region 1	\$252.46
- Region 2	293.46
- Region 3	273.52
- All Others	234.00
Family	577.00
Parent Plus	350.00
Couple	525.00
Medicare*	
- Low Option	96.41
- High Option	229.03

Region 1: Boyd, Carter, Elliott, Greenup

Region 2: Christian, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Todd, Trigg, Union, Webster

Region 3: Harlan, Lewis, Mason, Perry, Roberston

	Medicare Rate		Contracts in For	
	Low	High	Low	High
<u>Carrier</u>	Option	Option	Option	Option
Anthem BC/BS	101.26	231.35	2,839	17,314
Bankers Life	91.78	216.94	272	156
Option 2000	83.05	216.51	504	1,767
Humana	85.00	247.00	490	1,729
Humana				
Gold Plus	85.00	136.00	17	507

*Weighted average of current rates available from different carriers; weighting based on number of contracts in force.

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

Years	Medical Increase
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data

- For those active members with incomplete data, the following assumptions were made:
 - . If reported salary was zero or blank, then monthly salary was assumed to be \$887.58
 - If reported age was blank, then assume current age equal to age 18 plus years of service reported

- (12) Members with Multiple Service Records
- For active members with service in more than one system, the liability has been valued as

follows:

- . Service under all systems is aggregated for purposes of determining benefit eligibility.
- . Future service is projected only under the system in which the member is currently active.
- . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Changes in assumptions from those used in 2000 valuation.

B. <u>SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*</u>

(1) Annual Rates of Mortality:

Active Mortality			Disabled N	Mortality
<u>Age</u>	<u>Males</u>	<u>Females</u>	Males	<u>Females</u>
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

<u>Age</u>	<u>Disablement</u>	<u>Ultimate Termination</u>
25	0.033%	2.40%
30	0.039%	2.40%
40	0.105%	2.00%
50	0.423%	1.60%
55	0.794%	1.20%
60	1.395%	0.20%

(3) Select Rates of Termination:

Years of Service	Select Termination
1	35.0%
2	10.0%
3	7.0%
4	5.0%
5	4.0%

(4) Compensation Progression (after 1st 3 years):

		Compensation at Normal
	Rate of	Retirement as Percentage
<u>Age</u>	Annual Increase	Of Current Annual Compensation
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

^{*}Sample rates for hazardous position employees are included in the State Police Retirement System valuation.

SECTION III

RESULTS OF THE 2001 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the participating Agencies required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the annual Normal Cost, medical insurance and the administrative costs of the System is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated payroll of the participating Agencies as of June 30, 2001.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2001 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate of the participating Agencies is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the County Employees Retirement System as of June 30, 2001 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements relative to the Retirement Fund.

Table X contains information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I

COUNTY EMPLOYEES RETIREMENT SYSTEM RETIREMENT AND INSURANCE FUND DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2001

UNFUNDED ACTUARIAL ACCRU	ED LIABILITY - RETIREM	ENT FUND
		Percent *
Total Actuarial Accrued Liability	\$ 4,900,142,654	255.15%
Assets at Actuarial Value	6,910,500,565	359.83%
Unfunded Actuarial Accrued Liability	\$ (2,010,357,911)	(104.68%)
Contribution - Payment on Unfunded		
Actuarial Accrued Liability	\$ (104,138,682)	(5.42%)
NORMAL COST -	RETIREMENT FUND	
Retirement Benefits	\$ 180,619,180	9.40%
Disability Benefits	20,085,235	1.05%
W ithdraw al Benefits (Vested and		
Refund of Contributions)	13,909,478	0.72%
Survivor Benefits	10,969,310	0.57%
Total Normal Cost	\$ 225,583,203	11.74%
Less: Employee Contributions	103,767,361	5.40%
Normal Cost - State	\$ 121,815,842	6.34%
TOTAL ANNUAL EMPLOYER COST -	RETIREMENT AND INSU	JRANCE FUND
Non-Hazardous Duty Cost		
Normal Cost	\$ 93,608,939	5.86% **
Payment on Unfunded Actuarial		
Accrued Liability	(90,122,133)	(5.64%) **
Administrative Expense	7,042,404	0.44% **
Subtotal - Retirement Fund		
(Not Less Than Zero)	\$ 10,529,210	0.66% **
Group Hospital and Medical		
Insurance Premiums	90,746,709	5.68% **
Total Annual Cost	\$ 101,275,919	6.34% **
Hazardous Duty Cost		
Normal Cost	\$ 28,206,903	8.74% ***
Payment on Unfunded Actuarial		
Accrued Liability	(14,016,549)	(4.34%) ***
Administrative Expense	887,232	0.27% ***
Subtotal - Retirement Fund		
(Not Less Than Zero)	\$ 15,077,586	4.67% ***
Group Hospital and Medical		
Insurance Premiums	37,479,293	11.61% ***
Total Annual Cost	\$ 52,556,879	16.28% ***
Based on estimated annual salaries		
* Total	\$ 1,920,472,384	
** Non-Hazardous Position Employees		
	\$ 1,597,653,320	

TABLE II COUNTY EMPLOYEES RETIREMENT SYSTEM RETIREMENT FUND

CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2001

	N	Non-Hazardous Position		Hazardous Position			
		Employees		Employees		Total	
ACTUARIAL ACCRUED LIABILITY							
Active Members							
Retirement Benefits	\$	1,808,159,673	\$	573,685,697	\$	2,381,845,370	
Disability Benefits		127,412,953		13,821,167		141,234,120	
W ithdraw al Benefits (Vested and							
Refund of Contributions)		58,946,158		7,533,279		66,479,437	
Survivor Benefits		111,326,728		13,879,321		125,206,049	
Total - Actives	\$	2,105,845,512	\$	608,919,464	\$	2,714,764,976	
Inactive Members							
Retired Members and							
Beneficiaries	\$	1,551,618,750	\$	581,315,554	\$	2,132,934,304	
Vested Retirement		33,500,336		2,824,220		36,324,556	
Vested Membership		15,317,614		801,204		16,118,818	
Total - Inactives	\$	1,600,436,700	\$	584,940,978	\$	2,185,377,678	
Total Actuarial Accrued Liability	\$	3,706,282,212	\$	1,193,860,442	\$	4,900,142,654	
UNFUNDED ACTUARIAL ACCRUED LIABILITY							
Total Actuarial Accrued Liability	\$	3,706,282,212	\$	1,193,860,442	\$	4,900,142,654	
Less Actuarial Value of Assets		5,423,834,549		1,486,666,016		6,910,500,565	
Unfunded Actuarial Accrued Liability	\$	(1,717,552,337)	\$	(292,805,574)	\$	(2,010,357,911)	
NORMAL COST							
Retirement Benefits	\$	134,332,071	\$	46,287,109	\$	180,619,180	
Disability Benefits		17,889,877		2,195,358		20,085,235	
W ithdraw al Benefits (Vested and							
Refund of Contributions)		11,206,818		2,702,660		13,909,478	
Survivor Benefits		9,351,952		1,617,358		10,969,310	
Total Normal Cost	\$	172,780,718	\$	52,802,485	\$	225,583,203	
Less Employee Contributions		79,171,779		24,595,582		103,767,361	
Total Normal Cost - State	\$	93,608,939	\$	28,206,903	\$	121,815,842	

TABLE III COUNTY EMPLOYEES RETIREMENT SYSTEM UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

	Amount of Base on			
Date	Date	Current	Amortization	
Established	Established	Valuation Date	Payment	Source of Base
		N	lon-Hazardous Positio	on Employees
6/30/1990	\$ 93,672,421	\$ 116,923,615	\$ 7,984,831	Cumulative unfunded actuarial accrued liability set up as initial
				base under revised funding policy (30 year level percent of payroll
				method)
6/30/1991	61,472,822	75,941,702	4,994,990	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(125,111,651)	(152,596,619)	(9,690,496)	Experience gains/losses for 7/1/1991 to 6/30/1992; Asset valuation
				method change
6/30/1993	(28,358,370)	(34,073,827)	(2,093,700)	Experience gains/losses for 7/1/1992 to 6/30/1993
6/30/1994	59,026,195	69,727,865	4,153,968	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's
6/30/1995	(35,766,009)	(41,462,920)	(2,399,210)	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(188,502,047)	(214,095,120)	(12,052,913)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial
				assumptions; Correction of pension allocation for members in pay
				status with both non-hazardous and hazardous service in KERS
6/30/1997	(200,122,489)	(222,157,360)	(12,186,664)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree
				COLA effective 8/1/1996
6/30/1998	(311,976,854)	(338,026,376)	(18,093,200)	Experience gains/losses for 7/1/1997 to 6/30/1998; Increase in death
				benefit from \$2,500 to \$5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(379,088,077)	(400,376,132)	(20,938,471)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree
				COLA effective 7/1/1998
6/30/2000	(804,685,873)	(827,432,598)	(42,329,797)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree
				COLA effective 7/1/1999
6/30/2001	250,075,433	250,075,433	12,528,529	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree
				COLA effective 7/1/2000; 3-year average earnings window
Total	\$ (1,609,364,499)	\$ (1,717,552,337)	\$ (90,122,133)	

TABLE III (Continued) COUNTY EMPLOYEES RETIREMENT SYSTEM

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

	Amount of Base on			
Date	Date	Current	Amortization	
Established	Established	Valuation Date	Payment	Source of Base
	•	•	Hazardous Position	Employees
6/30/1990	\$ 68,584,978	\$ 85,609,017	\$ 5,846,325	Cumulative unfunded actuarial accrued liability set up as initial
				base under revised funding policy (30 year level percent of payroll
				method)
6/30/1991	29,934,803	36,980,569	2,432,360	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(12,941,304)	(15,784,295)	(1,002,366)	Experience gains/losses for 7/1/1991 to 6/30/1992; Asset valuation
				method change
6/30/1993	(7,291,213)	(8,760,711)	(538,311)	Experience gains/losses for 7/1/1992 to 6/30/1993
6/30/1994	1,854,577	2,190,820	130,516	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's
6/30/1995	24,831,672	28,786,931	1,665,727	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(65,565,268)	(74,467,116)	(4,192,275)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuaria
				assumptions; Correction of pension allocation for members in pay
				status with both non-hazardous and hazardous service in KERS
6/30/1997	(62,908,989)	(69,835,705)	(3,830,907)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree
				COLA effective 8/1/1996
6/30/1998	(50,329,820)	(54,532,272)	(2,918,894)	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average
				salary definition from 5 years to 3 years; Increase in death benefit
				from \$2,500 to \$5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(97,060,446)	(102,510,969)	(5,361,016)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree
				COLA effective 7/1/1998
6/30/2000	(194,399,700)	(199,894,958)	(10,226,226)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree
				COLA effective 7/1/1999
6/30/2001	79,413,115	79,413,115	3,978,518	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree
				COLA effective 7/1/2000
Total	\$ (285,877,595)	\$ (292,805,574)	\$ (14,016,549)	

TABLE IV COUNTY EMPLOYEES RETIREMENT SYSTEM INSURANCE FUND

DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2001

	N	on-Hazardous Position	Hazardous Position			
A.C.3	TILA DI	Employees AL ACCRUED LIA		Employees		Total
Active Members	I \$		В ILI		\$	1,622,841,055
Inactive Members	•	1,217,873,929	Þ	404,967,126	Þ	1,022,841,055
Retired Members	- \$	518,728,694	\$	280,782,555	\$	799,511,249
Beneficiaries	1 3		⊅		Ф	
Vested Retirement		143,179		30,879,713 4,975,898		31,022,892
		56,964,966 0		4,975,898		61,940,864
Vested Membership	<u></u>		Φ.	<u> </u>	Φ.	002 475 005
Total - Inactives	\$	575,836,839	\$	316,638,166	\$	892,475,005
Total Actuarial Accrued Liability	\$	1,793,710,768	\$	721,605,292	\$	2,515,316,060
UNFUNDED ACTUARIAL ACCR	UED L	IABILITY				
Total Actuarial Accrued Liability	\$	1,793,710,768	\$	721,605,292	\$	2,515,316,060
Less Actuarial Value of Assets		371,758,628		197,875,249		569,633,878
Unfunded Actuarial Accrued Liability	\$	1,421,952,140	\$	523,730,043	\$	1,945,682,182
	N	IORMAL COST				
Gross Normal Cost	T \$	132,598,044	\$	48,025,531	\$	180,623,575
Less Employee Contributions	ľ	0	*	0	Ť	0
Net Normal Cost - State	\$	132,598,044	\$	48,025,531	\$	180,623,575
Estimated Annual Salaries	\$	1,597,653,320	\$	322,819,064	\$	1,920,472,384
	AL AN	NUAL EMPLOYE	R CO			
Contribution Amount						
Normal Cost	- \$	132,598,044	\$	48,025,531	\$	180,623,575
Payment on Unfunded Actuarial						
Accrued Liability		77,998,282		28,805,249		106,803,531
Total Annual Cost	\$	210,596,326	\$	76,830,780	\$	287,427,106
As Percent of Payroll						
Normal Cost		8.30%		14.88%		9.41%
Payment on Unfunded Actuarial						
Accrued Liability		4.88%		8.92%		5.56%
Total Annual Cost		13.18%		23.80%		14.97%
INIC		ICE FUND CHOD		1		
Full Entry Age Funding Level	JURAN	ICE FUND SHOR	IFAL		г	14.97%
		13.18% 4.60%		23.80% 11.18%		
Current Funding Allocation * Additional to Pick Up By 2016		8.58%		12.62%	-	0.00% 14.97%
•		0.58%		12.02%	-	14.97%
Expected Increase in Insurance		0.330/		0.500/		N1 /A
Fund Rate in 2002 Valuation * Without regard to any one-year temporary.		0.33%	<u> </u>	0.58%		N /A

TABLE V COUNTY EMPLOYEES RETIREMENT SYSTEM UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2001

	Amount of Base on						
Date		Date		Current		Amortization	
Established		Established		Valuation Date		Payment	Source of Base
				N	on-H	azardous Positio	on Employees
6/30/1996	\$	901,011,537	\$	1,023,342,585	\$	57,611,118	Cumulative unfunded actuarial accrued liability set up as initial
							base under revised funding policy (30 year level percent of payroll
							method)
6/30/1997		29,886,573		33,177,291		1,819,973	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual
							insurance fund contributions vs. full entry age amounts
6/30/1998		62,468,342		67,684,340		3,622,872	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual
							insurance fund contributions vs. full entry age amounts
6/30/1999		(21,106,379)		(22,291,628)		(1,165,785)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual
							insurance fund contributions vs. full entry age amounts
6/30/2000		70,199,744		72,184,139		3,692,796	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual
							insurance fund contributions vs. full entry age amounts
6/30/2001		247,855,413		247,855,413		12,417,308	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual
							insurance fund contributions vs. full entry age amounts
Total	\$	1,290,315,230	\$	1,421,952,140		77,998,282	
					Haz	ardous Position I	
6/30/1996	\$	318,111,968	\$	361,302,282	\$	20,340,235	Cumulative unfunded actuarial accrued liability set up as initial
							base under revised funding policy (30 year level percent of payroll
							method)
6/30/1997		53,367,623		59,243,767		3,249,876	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual
							insurance fund contributions vs. full entry age amounts
6/30/1998		15,379,222		16,663,359		891,923	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual
							insurance fund contributions vs. full entry age amounts
6/30/1999		(13,162,362)		(13,901,507)		(727,007)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual
							insurance fund contributions vs. full entry age amounts
6/30/2000		17,607,673		18,105,404		926,236	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual
							insurance fund contributions vs. full entry age amounts
6/30/2001		82,316,738		82,316,738		4,123,986	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual
							insurance fund contributions vs. full entry age amounts
Total	\$	473,620,862	\$	523,730,043	\$	28,805,249	

TABLE VI COUNTY EMPLOYEES RETIREMENT SYSTEM BENEFIT PAYMENT PROJECTIONS

RET	RETIREMENT FUND PAYMENT PROJECTIONS										
	Non-Hazardous	Hazardous									
	Position	Position									
Plan Year	Employees	Employees	Total								
7/1/2001 to 6/30/2002	191,701,000	63,816,000	255,517,000								
7/1/2002 to 6/30/2003	204,575,000	67,846,000	272,421,000								
7/1/2003 to 6/30/2004	218,510,000	72,483,000	290,993,000								
7/1/2004 to 6/30/2005	234,490,000	78,343,000	312,833,000								
7/1/2005 to 6/30/2006	253,500,000	85,906,000	339,406,000								
7/1/2006 to 6/30/2007	275,066,000	95,413,000	370,479,000								
7/1/2007 to 6/30/2008	298,795,000	105,373,000	404,168,000								
7/1/2008 to 6/30/2009	325,005,000	117,618,000	442,623,000								
7/1/2009 to 6/30/2010	353,349,000	130,845,000	484,194,000								
7/1/2010 to 6/30/2011	384,366,000	144,846,000	529,212,000								

INSURANCE FUND PAYMENT PROJECTIONS Non-Hazardous Hazardous **Position** Position Plan Year Employees Total Employees 7/1/2001 to 6/30/2002 36,579,000 15,593,000 52,172,000 7/1/2002 to 6/30/2003 42,564,000 17,669,000 60,233,000 6/30/2004 7/1/2003 to 49,193,000 19,991,000 69,184,000 7/1/2004 to 6/30/2005 56,555,000 22,599,000 79,154,000 7/1/2005 to 6/30/2006 65,210,000 25,882,000 91,092,000 7/1/2006 to 6/30/2007 104,395,000 74,785,000 29,610,000 7/1/2007 to 6/30/2008 85,322,000 33,579,000 118,901,000 7/1/2008 to 6/30/2009 97,516,000 38,506,000 136,022,000 7/1/2009 to 6/30/2010 111,674,000 44,274,000 155,948,000 7/1/2010 to 6/30/2011 127,851,000 50,734,000 178,585,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

TABLE VII

COUNTY EMPLOYEES RETIREMENT SYSTEM RETIREMENT FUND

ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIA	L ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and			
Expenses Payable) *	\$	6,910,500,565	
Actuarial Present Value of Future Member Contribu	tions		1,198,151,209
Actuarial Present Value of Future Employer			
Contributions			
For Normal Costs	\$ 1,314,803,154	1	
For Unfunded Actuarial Accrued Liability	(2,010,357,91	1)	
Total		\$	(695,554,757)
Total Actuarial Assets	•	\$	7,413,097,017
ACTUARIAL	LIABILITIES		
Actuarial Present Value of Future Benefits			
Inactive Members:			
Retired Members and Beneficiaries	\$ 2,132,934,304	1	
Vested Retirement	36,324,556	5	
Vested Membership	3		
Total - Inactive	\$	2,185,377,678	
Actuarial Present Value of Future Benefits			
Active Members:			
Retirement Benefits	\$ 4,391,167,713	3	
Disability Benefits	356,409,233	3	
Withdrawal Benefits (Vested and			
Refund of Contributions)	234,476,889	7	
Survivor Benefits	245,665,504	1	
Total - Active		\$	5,227,719,339
Refunds and Expenses Payable		\$	0
Total Actuarial Liabilities		\$	7,413,097,017
Notes			
* Values as of June 30, 2001			
Market value of assets:	Non-Hazardous	\$	4,397,346,547
	Hazardous	\$	1,211,154,618
	Total	\$	5,608,501,165
Actuarial value of assets:		\$	6,910,500,565
Member's Contribution Account:		\$	855,815,124
** Present value of accrued benefit deferred to no	ormal retirement date.		

TABLE VIII COUNTY EMPLOYEES RETIREMENT SYSTEM INSURANCE FUND ACTUARIAL BALANCE SHEET - JUNE 30, 2001

EI - JUI	NE 30, 2001						
SSETS							
Fund Assets at Actuarial Value (Plus Refunds and							
		\$	569,633,878				
s (Note:	AII						
ement F	und)		0				
\$	2,128,671,358						
	1,945,682,182						
		\$	4,074,353,540				
•		\$	4,643,987,418				
BILITIES	6						
\$	830,534,141						
	61,940,864						
	0						
		\$	892,475,005				
		\$	3,751,512,413				
		\$	0				
		\$	4,643,987,418				
		1					
Nο	n-Hazardous	\$	331,066,746				
1			173,636,191				
		\$	504,702,937				
		\$	569,633,878				
1	SSETS Ins (Note: Ins	\$ 2,128,671,358 1,945,682,182 BILITIES \$ 830,534,141 61,940,864	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$				

TABLE IX COUNTY EMPLOYEES RETIREMENT SYSTEM ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2001 GASB DISCLOSURE INFORMATION

Non-Hazardous Position Position Employees Employ NUMBER OF MEMBERS Inactive Members 21,706 3,										
Remployees Employ NUMBER OF MEMBERS Inactive Members	dous									
NUMBER OF MEMBERS Inactive Members	ition									
Inactive Members	yees	Total								
	NUMBER OF MEMBERS									
Retired Members 21,706 3,										
	3,004	24,710								
Beneficiaries 2,709	217	2,926								
Vested Retirements 4,080	148	4,228								
Vested Membership 24,276	462 2	24,738								
Total Inactive Members 52,771 3,	3,831 5	56,602								
Active Members										
Vested Members 44,965 4,	1,603 4	19,568								
Nonvested Members 33,808 3,	3,983	37,791								
Total Active Members 78,773 8,	3,586	37,359								
Total Members 131,544 12,	2,417 14	13,961								

TABLE X COUNTY EMPLOYEES RETIREMENT SYSTEM ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2001 INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

			Non-Hazardous	Hazardous		
			Position	Position		
			Employees	Employees		Total
		NI	JMBER OF MEMBERS	Limpioyees		10141
Contracts in Force - Retire	es and D		, mbek or membeko			
(1) Single;	-	100% Paid	2,528	782		3,310
Pre-Medicare	_	75% Paid	468	38		506
	_	50% Paid	444	35		479
	_	25% Paid	249	14		263
	-	0% Paid	526	0		526
(2) Family;	-	100% Paid	154	499		653
Pre-Medicare	-	75% Paid	9	14		23
	-	50% Paid	11	10		21
	-	25% Paid	8	5		13
	-	0% Paid	3	0		3
(3) Parent +;	-	100% Paid	138	177		315
Pre-Medicare	-	75% Paid	8	16		24
	-	50% Paid	2	7		9
	-	25% Paid	6	2		8
	-	0% Paid	50	0		50
(4) Couple +;	-	100% Paid	463	717		1,180
Pre-M edicare	-	75% Paid	54	11		65
	-	50% Paid	59	10		69
	-	25% Paid	27	1		28
	-	0% Paid	3	0		3
(5) Medicare Regular	-	100% Paid	945	19		964
	-	75% Paid	0	0		0
	-	50% Paid	0	0		0
	-	25% Paid	717	13		730
	-	0% Paid	550	0		550
(6) Medicare High	-	100% Paid	3,382	559		3,941
Option	-	75% Paid	1,626	65		1,691
	-	50% Paid	1,736	46		1,782
	-	25% Paid	967	21		988
	-	0% Paid	1,263	3		1,266
Vested Retirements			4,080	148		4,228
Vested Membership			24,276	462		24,738
Active Members			78,773	8,586		87,359
		UNFUNDED	MEDICAL BENEFIT OB	LIGATION		
Medical Benefit Obligation						
Retirees, Beneficiaries and					1.	
Vested Terminated Members			\$ 575,836,839	\$ 316,638,166	\$	892,475,005
Active Members			1,217,873,929	404,967,126		1,622,841,055
Total Medical Benefit Obl			\$ 1,793,710,768	\$ 721,605,292		2,515,316,060
Net Assets at Actuarial Val			\$ 371,758,628	\$ 197,875,249	\$	569,633,878
Unfunded Medical Benefit	Obligati	on	\$ 1,421,952,140	\$ 523,730,043	\$	1,945,682,182

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from \$4,453,154,831 on June 30, 2000 to \$4,900,142,654 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from \$(2,276,421,497) to \$(2,010,357,911). Total actuarial value of assets as of June 30, 2001 was equal to \$6,910,500,565. The Unfunded Actuarial Accrued Liability increased from (121.95%) to (104.68%) as a percentage of annual payroll and increased from (51.1%) to (41.0%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from \$2,066,652,957 on June 30, 2000 to \$2,515,316,060 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from \$1,578,352,351 to \$1,945,682,182. Total actuarial value of assets as of June 30, 2001 was equal to \$569,633,878. The Unfunded Actuarial Accrued Liability increased from 76.4% to 77.4% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

The change in contribution rate between the 2000 and 2001 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	Hazardous Position Employees
June 30, 2000 Contribution Rate	6.34%	16.28%
Change in Payment Percentage Due to Covered		
Payroll Experience	(0.23%)	0.32%
Investment Return Experience		
> Prior to Asset Valuation Method Change	0.04%	0.15%
> Impact of Asset Valuation Method Change	0.76%	0.92%
Salary Increase Experience	(0.66%)	0.02%
Decrements Experience*	0.47%	(0.07%)
Change in Insurance Fund Rate		
> One-Year Temporary Funding Rate	(0.77%)	(2.16%)
> Increase in Long Term Funding Rate	0.31%	0.55%
Change in Administrative Expense Rate	(0.11%)	(0.17%)
Retiree COLA Effective 7/1/2000	0.10%	0.19%
Legislated Changes		
> 3 Year Average Window for Nonhazardous	0.09%	0.00%
Change in Actuarial Assumptions	0.00%	0.25%
Reduction in Amount Available from Prior Year Retirement		
Fund Rate to Offset Current Year Increases	N/A	N/A
June 30, 2001 Contribution Rate	6.34%	16.28%
* Includes mortality, disability, termination of employment and	l retirement experience.	

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees is 0.66%. An additional 5.68% is required to fund medical insurance for retirees, bringing the required contribution up to 6.34%. This is the same as the current 6.34% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2002 should remain at the 6.34% level, and we so recommend.

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees is 4.67%. An additional 11.61% is required to fund medical insurance for retirees, bringing the required contribution up to 16.28%. This is the same as the current 16.28% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2002 should be remain at the 16.28% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2002 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

COUNTY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT FUND									
		Unfunded							
	Total Actuarial	Actuarial		Actuarial Value					
July 1 of Year	Accrued	Accrued	Percent	of Assets	Increase in				
Shown	Liability	Liability	Unfunded		Assets				
1960	\$ 5,602,131	\$ 4,737,680	84.6%	\$ 864,451	\$ 864,451				
1965	12,510,487	6,897,273	55.1%	5,613,214	1,255,742				
1971	40,305,948	16,885,927	41.9%	23,420,022*	4,850,170				
1975	85,322,085	24,467,454	28.7%	60,854,631*	11,704,780				
1976	128,824,236	50,089,614	38.9%	78,734,622*	17,879,991				
1977	152,900,347	52,474,756	34.3%	100,425,591*	21,690,969				
1978	175,194,867	50,394,913	28.8%	124,799,954*	24,374,363				
1979	213,834,377	60,742,472	28.4%	153,091,905*	28,291,951				
1980	266,018,621	75,787,680	28.5%	190,230,941*	37,139,036				
1981	260,872,162	27,101,917	10.4%	233,770,245	43,539,304				
1982	306,087,531	20,552,642	6.7%	285,534,889	51,764,644				
1983	340,705,763	(2,450,006)	(0.8%)	343,155,769	57,620,880				
1984	421,336,269	15,148,838	3.6%	406,187,431	63,031,662				
1985	463,618,532	(14,424,689)	(3.1%)	478,043,221	71,855,790				
1986	535,948,094	(67,867,706)	(12.7%)	603,815,800	125,772,579				
1987	678,442,760	(49,287,967)	(7.3%)	727,730,727	123,914,927				
1988	829,346,323	(10,232,573)	(1.2%)	839,578,896	111,848,169				
1989	1,113,868,548	35,815,913	3.2%	1,078,052,635	238,473,739				
1990	1,432,323,666	162,257,399	11.3%	1,270,066,267	192,013,632				
1991	1,654,338,706	258,111,701	15.6%	1,396,227,005	126,160,738				
1992**	1,861,978,403	126,939,495	6.8%	1,735,038,908	338,811,903				
1993	2,079,930,047	94,249,338	4.5%	1,985,680,709	250,641,801				
1994	2,330,344,241	156,989,469	6.7%	2,173,354,772	187,674,063				
1995	2,603,575,921	149,447,861	5.7%	2,454,128,060	280,773,288				
1996	2,778,316,473	(101,712,065)	(3.7%)	2,880,028,538	425,900,478				
1997	3,144,928,093	(369,096,965)	(11.7%)	3,514,025,868	633,997,330				
1998	3,529,912,902	(743,349,593)	(21.1%)	4,273,262,495	759,236,627				
1999	3,955,132,659	(1,241,746,262)	(31.4%)	5,196,878,921	923,616,426				
2000	4,453,154,831	(2,276,421,497)	(51.1%)	6,729,576,328	1,532,697,407				
2001***	4,900,142,654	(2,010,357,911)	(41.0%)	6,910,500,565	180,924,237				

^{*}Includes capitalized appreciation of investments.

^{**}Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.

^{***}Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

	COUNTY EMPLOYEES RETIREMENT SYSTEM - INSURANCE FUND									
July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value of Assets	Increase in Assets					
1990	\$ 700,151,838	\$ 670,720,901	95.8%	\$ 29,430,397	\$ N/A					
1991	823,012,809	780,592,065	94.8%	42,420,744	12,989,807					
1992	1,041,905,457	984,949,556	94.5%	56,955,901	14,535,157					
1993	1,244,258,042	1,170,004,170	94.0%	74,253,872	17,297,971					
1994	1,551,138,800	1,451,623,905	93.6%	99,514,895	25,261,023					
1995	1,679,893,225	1,554,439,285	92.5%	125,453,940	25,939,045					
1996**	1,386,659,746	1,219,123,505	87.9%	167,536,241	42,082,301					
1997	1,541,360,457	1,336,839,680	86.7%	204,520,777	36,984,536					
1998	1,706,626,110	1,451,039,735	85.0%	255,586,375	51,065,598					
1999	1,801,154,401	1,454,627,009	80.8%	346,527,392	90,941,017					
2000	2,066,652,957	1,578,352,351	76.4%	488,300,606	141,773,214					
2001***	2,515,316,060	1,954,682,182	77.4%	569,633,878	81,333,272					

^{**}Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the Counties Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding polices adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Date	
 Date	
	Date

William M. Mercer, Incorporated 462 South Fourth Avenue, Suite 1500 Louisville, Kentucky 40202-3431 $\mathfrak{D}(502)$ 561-4500

^{***}Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

SECTION V STATISTICAL DATA AS OF JUNE 30, 2001

COUNTY EMPLOYEE S RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

EARNINGS	BY AGE	GROUPS							
AGE		MALE			FEMALE			TOTAL	
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	1,866	27,288,499	14,624	102	1,238,508	12,142	1,968	28,527,007	14,495
20-24	3,556	58,604,719	16,481	1,241	17,837,510	14,373	4,797	76,442,229	15,935
25-29	1,985	43,041,614	21,683	2,562	42,206,188	16,474	4,547	85,247,802	18,748
30-34	2,551	64,203,714	25,168	4,372	70,177,649	16,052	6,923	134,381,362	19,411
35-39	3,281	87,788,161	26,757	6,764	107,387,677	15,876	10,045	195,175,837	19,430
40-44	4,016	114,847,326	28,597	8,507	144,882,140	17,031	12,523	259,729,466	20,740
45-49	4,055	120,508,734	29,719	8,492	154,008,749	18,136	12,547	274,517,482	21,879
50-54	3,734	111,879,383	29,962	7,234	135,350,770	18,710	10,968	247,230,152	22,541
55-59	2,623	72,154,065	27,508	4,960	90,918,846	18,330	7,583	163,072,911	21,505
60-64	1,784	44,966,786	25,206	2,681	46,970,534	17,520	4,465	91,937,320	20,591
65-69	734	14,745,264	20,089	865	13,187,100	15,245	1,599	27,932,364	17,469
70-74	308	5,632,963	18,289	280	4,090,188	14,608	588	9,723,151	16,536
75+	114	2,005,992	17,596	106	1,730,244	16,323	220	3,736,236	16,983
TOTAL	30,607	767,667,218	25,081	48,166	829,986,101	17,232	78,773	1,597,653,320	20,282
EARNINGS BY SERVICE GROUPS									
SERVICE		MALE			FEMALE			TOTAL	
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	2,378	42,464,564	17,857	2,017	30,641,688	15,192	4,395	73,106,252	16,634
1	4,562	82,953,610	18,184	6,248	80,749,006	12,924	10,810	163,702,616	15,144
2	3,531	71,141,865	20,148	5,284	74,704,876	14,138	8,815	145,846,741	16,545
3	2,862	63,226,010	22,092	4,302	63,358,737	14,728	7,164	126,584,747	17,670

15,261

14,173

16,570

19,737

5,209

36,393

18,872

11,913

94,380,120 18,119

16,586

19,662

23,402

603,620,475

371,063,949

278,786,511

7,641 150,810,606

4 1,954 44,705,712 22,879 3,255 49,674,408

0-4 15,287 304,491,761 19,918 21,106 299,128,715

5-9 6,159 160,403,627 26,044 12,713 210,660,322

4,272 127,975,905 29,957

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COUNTY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

EARNINGS BY AGE GROUPS

AGE		MALE			FEMALE			TOTAL	
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
				_					
0-19	126	3,055,596	24,251	3	53,652	17,884	129	3,109,248	24,103
20-24	410	11,564,976	28,207	29	684,660	23,609	439	12,249,636	27,903
25-29	1,229	38,964,324		135	4,089,444	30,292	1,364	43,053,768	31,564
30-34	1,614	58,353,991	36,155	194	6,419,964	33,093	1,808	64,773,955	35,826
35-39	1,495	59,492,510	39,794	175	6,066,444	34,665	1,670	65,558,954	39,257
40-44	1,106	45,638,995	41,265	144	5,532,854	38,423	1,250	51,171,849	40,937
45-49	848	38,273,220	45,134	111	3,989,623	35,943	959	42,262,843	44,070
50-54	494	22,540,891	45,629	72	2,723,628	37,828	566	25,264,519	44,637
55-59	230	9,721,860	42,269	41	1,230,924	30,023	271	10,952,784	40,416
60-64	86	3,119,148	36,269	10	294,804	29,480	96	3,413,952	35,562
65-69	15	442,428	29,495	5	106,728	21,346	20	549,156	27,458
70-74	7	260,832	37,262	1	16,416	16,416	8	277,248	34,656
75+	6	181,152	30,192	0	0	0	6	181,152	30,192
TOTAL	7,666	291,609,923	38,039	920	31,209,141	33,923	8,586	322,819,064	37,598
EARNINGS	BY SER	VICE GROUPS							
SERVICE		MALE			FEMALE			TOTAL	
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	423	10,038,504	23,732	75	1,604,990	21,400	498	11,643,494	23,381
1	973	27,962,438	28,738	158	4,434,060	28,064	1,131	32,396,498	28,644
2	674	21,174,974		91	2,703,972	29,714	765	23,878,946	31,214
3	705	23,380,956	33,164	112	3,460,428	30,897	817	26,841,384	32,854
4	459	16,155,912	35,104	55	1,872,480	34,045	514	18,028,392	35,075
ı	439	10,133,912	33,190	33	1,072,400	34,043	214	10,020,392	33,073
0 - 4	3,234	98,712,784	30,523	491	14,075,930	28,668	3,725	112,788,714	30,279
5-9	1,853	71,309,556	38,483	242	8,508,091	35,157	2,095	79,817,647	38,099
10-14	1,398	61,240,332	43,806	108	4,508,748	41,748	1,506	65,749,080	43,658
15-19	587	27,485,815	46,824	45	2,191,068	48,690	632	29,676,883	46,957
20-24	340	17,924,256	52,718	30	1,688,868	56,296	370	19,613,124	53,008
25-29	188	10,998,180	58,501	4	236,436	59,109	192	11,234,616	58,514
30-34	52	3,097,716	59,571	0	0	0	52	3,097,716	59,571
35-39	12	723,396	60,283	0	0	0	12	723,396	60,283
40+	2	117,888	58,944	0	0	0	2	117,888	58,944
TOTAL	7,666	291,609,923	38,039	920	31,209,141	33,923	8,586	322,819,064	37,598

COUNTY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE AGE								SERVI	ICE	
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,866									1,866
20-24	3,262	294								3,556
25-29	1,452	513	20	1.0						1,985
30-34	1,550	750	241	10						2,551
35-39	1,514	781	691	278	17	4.0				3,281
40-44	1,526	887	706	509	348	40	1.0			4,016
45-49	1,298	907	703	490	404	234	19	-		4,055
50-54 55-59	1,123	793	751	437	336	221	66 43	7	2	3,734
60-64	845	582	491	314	207	121	43	17	3	2,623
65-69	492	377	386	279	147	79 1.2	16 7	7	1	1,784
70-74	247 93	184 68	160 89	71 29	50 19	12 4	2	3 2	2	734 308
70-7 4 75+	19	23	34	29	12	3	1	2	۷	114
TOTAL	15,287	6,159		2,437		714	154	38	6	30,607
IOIAL	15,28/	0,159	4,272	2,43/	1,540	714	154	38	О	30,607
FEMALE										
AGE								SERV	ICE	
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	102									102
20-24	1,202	39	1.0							1,241
25-29	2,157	389	16							2,562
30-34	3,145	948	256	23	1.0					4,372
35-39	4,128	1,772	626	226	12	2.4				6,764
40-44	3,871	2,793	1,138	393	278	34	0.0			8,507
45-49 50-54	2,752	2,793	1,763	615	366	181	22	7		8,492
50-54 55-59	1,867	1,926	1,806	893	465	205	65 43	7	_	7,234
60-64	1,111 522	1,126 636	1,131 596	763 401	563 348	202 138	43 30	16 6	5 4	4,960
65-69	162	215	214	144	346 87	136 26	30 11	1	5	2,681 865
70-74	56	61	21 4 77	48	31	4	2	1	1	280
75+	31	15	18	21	16	2	2		1	106
TOTAL	21,106	12,713	7,641	3,527	2,166	792	175	30	16	48,166
101111	21,100	12,713	7,011	3,321	2,100	122	175	30	10	10,100
TOTAL										
AGE								SERV	ICE	
GD 0775										
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19 20-24	1,968	222								1,968
25-29	4,464	333	26							4,797
	3,609	902	36 407	2.2						4,547
30-34 35-39	4,695	1,698	497	33	20					6,923
40-44	5,642 5,397	2,553	1,317	504	29	7.4				10,045
45-49	4,050	3,680 3,700	1,844	902	626 770	74 415	11			12,523
50-54		2,719	2,466	1,105	770	415	41	1 /		12,547
50-54 55-59	2,990 1,956	2,719 1,708	2,557 1,622	1,330	801 770	426 323	131 86	14 33	Ω	10,968 7,583
60-64	1,956	1,708	982	1,077 680	495	323 217	46	13	8 5	4,465
65-69	409	399	374	215	137	38	18	4	5	1,599
70-74	149	129	166	215 77	50	30 8	4	2	3	588
75+	50	38	52	41	28	o 5	3	2	1	220
TOTAL	36,393	18,872	11,913	5,964	3,706	1,506	329	68	22	78,773
	20,373	_0,0,2	,	2,201	2,.00	_,	247	0.0		,

COUNTY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE AGE								SERV	ICE	
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19 20-24	126 402	0								126 410
25-29	975	8 252	2							1,229
30-34	975 775	634	204	1						1,229
35-39	373	443	539	136	4					1,495
40-44	221	204	340	261	79	1				1,106
45-49	141	162	166	119	161	91	8			848
50-54	102	74	93	44	73	80	27	1		494
55-59	79	43	30	20	19	16	15	8		230
60-64	30	26	16	5	3		2	3	1	86
65-69	6	5	4							15
70-74	1		4	1					1	7
75+	3	2			1					6
TOTAL	3,234	1,853	1,398	587	340	188	52	12	2	7,666
FEMALE AGE								CEDIA	. CE	
AGE	GROTID	 		• • • • • • • •				SERV	ICE	
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3	0 2	_0 _1	10 17	20 21	20 27	30 31	33 37		3
20-24	29									29
25-29	119	16								135
30-34	106	75	12	1						194
35-39	73	51	41	10						175
40-44	55	31	28	23	7					144
45-49	51	29	12	6	12	1				111
50-54	29	20	7	4	9	3				72
55-59	20	13	5	1	2					41
60-64	4	3	3							10
65-69	2	3								5
70-74		1								1
75+ TOTAL	401	242	1.00	4.5	2.0	4	0	0	0	0
IOIAL	491	242	108	45	30	4	0	0	0	920
$\frac{\text{TOTAL}}{\text{AGE}}$								SERV	ICE	
	GROUP									
GROUP	0 - 4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	129									129
20-24	431	8								439
25-29	1,094	268	2							1,364
30-34	881	709	216	2						1,808
35-39	446	494	580	146	4					1,670
40-44	276	235	368	284	86	1				1,250
45-49	192	191	178	125	173	92	8	_		959
50-54	131	94	100	48	82	83	27	1		566
55-59	99	56	35	21	21	16	15	8	4	271
60-64	34	29	19	5	3		2	3	1	96
65-69 70-74	8 1	8 1	4	1					1	20
70-74 75+	3	2	4	1	1				1	8 6
TOTAL	3 3,725	2,095	1,506	632	370	192	52	12	2	8,586
IOIAL	5,145	2,000	1,500	0.02	570	174	J <u> </u>	14	4	0,500

COUNTY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE								SER	VICE	
GROUP	GROUP. 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,968 14,495									1,968 14,495
20-24	4,464 15,673	333 19,448								4,797 15,935
25-29	0,000	902 22,175	36 24,465							4,547 18,748
30-34	4,695 17,014	1,698 23,386	497 27,815	33 29,313						6,923 19,411
35-39	5,642 15,724	2,553 20,454		504 30,917						10,045 19,430
40-44	5,397 16,373	3,680 19,154		902 32,411		74 40,567				12,523 20,740
45-49	4,050 17,315	3,700 18,893		1,105 29,087			41 46,754			12,547 21,879
50-54	2,990 18,408	2,719 19,652		1,330 25,876		426 39,854	131 45,987	14 43,168		10,968 22,541
55-59	1,956 17,107	1,708 19,153		1,077 23,649		323 35,281	86 42,006		8 53,712	
60-64	1,014 16,073	1,013 17,729		680 22,762			46 39,787		5 86,131	-
65-69	409 14,592	399 14,910		215 18,999			18 35,783		5 60,718	•
70-74	149 15,273	129 12,731					4 39,261			
75+	50 12,654	38 14,928	52 13,726	41 19,785	28 20,451	5 31,495	3 34,140	2 48,144	1 82,524	220 16,983
TOTAL			11,913 23,402				329 43,427		22 65,142	
TOTAL EAR		1,597,	,653,320 7.29				Note: Eamatrix have not	been lim		this
AVERAGE A	AGE		43.39				401(a)(1	7).		

COUNTY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE								SER	VICE	
GROUP	GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	129 24,103									129 24,103
20-24		8 31,629								439 27,903
25-29	1,094 30,252	268 36,886								1,364 31,564
30-34		709 39,385								1,808 35,826
35-39	446 30,684	494 38,503								1,670 39,257
40-44		235 36,797			86 51,070	1 38,796				1,250 40,937
45-49		191 37,269					8 63,596			959 44,070
50-54		94 39,118					27 58,154			566 44,637
55-59					21 45,925		15 61,444			271 40,416
60-64							2 48,570			
65-69		8 21,312								20 27,458
70-74	1 25,776	1 16,416								8 34,656
75+	3 28,156	2 27,342			1 42,000					6 30,192
TOTAL	3,725 30,279	2,095 38,099					52 59,571		2 58,944	8,586 37,598
TOTAL EAR AVERAGE S		322,8	7.62				Note: Eamatrix have not	been lim		this
AVERAGE A	.GE		37.17				401(a)(1	7).		

COUNTY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION TABULATION BY MONTHLY SALARY JUNE 30, 2001

	NUMBER OF MEMBERS					
MONTHLY SALARY	MALES	FEMALES	TOTAL			
UNDER \$ 500	816	1,292	2,108			
\$ 500 - \$ 749	1,778	5,159	6,937			
\$ 750 - \$ 999	2,824	11,740	14,564			
\$ 1,000 - \$ 1,249	2,718	7,509	10,227			
\$ 1,250 - \$ 1,499	3,036	5,451	8,487			
\$ 1,500 - \$ 1,749	3,207	4,354	7,561			
\$ 1,750 - \$ 1,999	2,952	3,327	6,279			
\$ 2,000 - \$ 2,249	2,551	2,633	5,184			
\$ 2,250 - \$ 2,499	2,056	1,983	4,039			
\$ 2,500 - \$ 2,749	1,780	1,405	3,185			
\$ 2,750 - \$ 2,999	1,358	986	2,344			
\$ 3,000 - \$ 3,499	2,011	1,098	3,109			
\$ 3,500 - \$ 3,999	1,188	483	1,671			
\$ 4,000 - \$ 4,499	725	265	990			
\$ 4,500 - \$ 4,999	485	171	656			
\$ 5,000 - \$ 5,499	425	135	560			
\$ 5,500 - \$ 5,999	235	60	295			
\$ 6,000 - \$ 6,499	146	43	189			
\$ 6,500 - \$ 6,999	109	23	132			
\$ 7,000 - \$ 7,499	46	14	60			
\$ 7,500 - \$ 7,999	43	5	48			
\$ 8,000 - \$ 8,499	30	5	35			
\$ 8,500 - \$ 8,999	22	4	26			
\$ 9,000 - \$ 9,499	17	8	25			
\$ 9,500 - \$ 9,999	13	2	15			
\$ 10,000 AND OVER	36	11	47			
TOTAL	30,607	48,166	78,773			
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF \$80,000 AND OVER	195	45	240			

COUNTY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION TABULATION BY MONTHLY SALARY JUNE 30, 2001

	NUMBER OF MEMBERS					
MONTHLY SALARY	MALES	FEMALES	TOTAL			
UNDER \$ 500	41	7	48			
\$ 500 - \$ 749	15	3	18			
\$ 750 - \$ 999	32	7	39			
\$ 1,000 - \$ 1,249	44	14	58			
\$ 1,250 - \$ 1,499	99	19	118			
\$ 1,500 - \$ 1,749	195	32	227			
\$ 1,750 - \$ 1,999	334	90	424			
\$ 2,000 - \$ 2,249	583	123	706			
\$ 2,250 - \$ 2,499	793	97	890			
\$ 2,500 - \$ 2,749	830	90	920			
\$ 2,750 - \$ 2,999	737	80	817			
\$ 3,000 - \$ 3,499	1,314	141	1,455			
\$ 3,500 - \$ 3,999	1,162	112	1,274			
\$ 4,000 - \$ 4,499	720	56	776			
\$ 4,500 - \$ 4,999	376	25	401			
\$ 5,000 - \$ 5,499	167	11	178			
\$ 5,500 - \$ 5,999	100	4	104			
\$ 6,000 - \$ 6,499	67	3	70			
\$ 6,500 - \$ 6,999	33	4	37			
\$ 7,000 - \$ 7,499	8	0	8			
\$ 7,500 - \$ 7,999	7	1	8			
\$ 8,000 - \$ 8,499	6	0	6			
\$ 8,500 - \$ 8,999	1	1	2			
\$ 9,000 - \$ 9,499	1	0	1			
\$ 9,500 - \$ 9,999	0	0	0			
\$ 10,000 AND OVER	1	0	1			
TOTAL	7,666	920	8,586			
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED)		_				
ANNUAL SALARY OF \$80,000 AND OVER	22	2	24			

COUNTY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION MEMBERS WITH SERVICE IN ANOTHER SYSTEM JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN CERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	542	2,028	2,570
KERS - HAZARDOUS	21	55	76
CERS - HAZARDOUS	0	264	264
STATE POLICE	6	18	24
TOTAL - ALL SYSTEMS	569	2,365	2,934
MEME	BERS CURRENTLY NOT ACTIVE	IN CERS NONHAZARDOUS	
SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	2,358	209	2,567
KERS - HAZARDOUS	216	58	274
CERS - HAZARDOUS	2,585	54	2,639
STATE POLICE	93	11	104
TOTAL - ALL SYSTEMS	5,252	332	5,584

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

COUNTY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION MEMBERS WITH SERVICE IN ANOTHER SYSTEM JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN CERS HAZARDOUS

	WENDERS SCHWENTER MOTIVE	III CENS III IEI III DOOD								
SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL							
KERS - NONHAZARDOUS	22	279	301							
KERS - HAZARDOUS	11	108	119							
CERS - NONHAZARDOUS	0	2,585	2,585							
STATE POLICE	3	44	47							
TOTAL - ALL SYSTEMS	36	3,016	3,052							
	MEMBERS CURRENTLY NOT ACTIVE IN CERS HAZARDOUS									
SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	<u>TOTAL</u>							
KERS - NONHAZARDOUS	73	29	102							
KERS - HAZARDOUS	33	5	38							
CERS - NONHAZARDOUS	264	54	318							
STATE POLICE	66	4	70							
TOTAL - ALL SYSTEMS	436	92	528							

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

COUNTY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION RETIRED LIVES SUMMARY JUNE 30, 2001

	M	MALE LIVES		MALE LIVES	TOTAL		
		MO NTHLY		MO NTHLY		MO NTHLY	
	NUMBER	BENEFITS	NUMBER	BENEFITS	NUMBER	BENEFITS	
BASIC FORM	2,352	1,481,788.81	7,455	3,304,148.74	9,807	4,785,937.55	
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00	
JOINT & SURVIVOR							
100% TO BENEFICIARY	1,636	1,065,937.33	625	219,624.32	2,261	1,285,561.65	
66-2/3% TO BENEFICIARY	458	549,253.97	176	117,906.11	634	667,160.08	
50% TO BENEFICIARY	695	676,875.85	437	293,347.66	1,132	970,223.51	
POP-UP OPTION	1,433	1,343,458.62	826	519,820.72	2,259	1,863,279.34	
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00	
10 YEARS CERTAIN & LIFE	1,178	625,182.95	2,031	872,618.43	3,209	1,497,801.38	
SOCIAL SECURITY OPTION							
OPTION C	193	271,742.14	318	236,966.09	511	508,708.23	
OPTION D	460	624,255.79	174	136,378.31	634	760,634.10	
OPTION E	0	0.00	0	0.00	0	0.00	
OPTION F	0	0.00	0	0.00	0	0.00	
DEPENDENT CHILD	1	324.00	1	324.00	2	648.00	
REFUND	0	0.00	0	0.00	0	0.00	
15 YEARS CERTAIN & LIFE	431	279,775.08	324	148,667.41	755	428,442.49	
20 YEARS CERTAIN & LIFE	261	231,092.53	240	138,146.29	501	369,238.82	
5 YEARS ONLY	0	0.00	1	124.55	1	124.55	
TOTAL	9,098	7,149,687.07	12,608	5,988,072.63	21,706	13,137,759.70	

COUNTY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION RETIRED LIVES SUMMARY JUNE 30, 2001

	MALE LIVES		FEI	MALE LIVES	TOTAL		
		MO NTHLY		MO NTHLY		MO NTHLY	
	NUMBER	BENEFITS	NUMBER	BENEFITS	NUMBER	BENEFITS	
BASIC FORM	355	582,936.39	88	70,799.69	443	653,736.08	
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00	
JOINT & SURVIVOR							
100% TO BENEFICIARY	332	482,283.01	18	10,412.28	350	492,695.29	
66-2/3% TO BENEFICIARY	159	306,674.91	5	7,067.84	164	313,742.75	
50% TO BENEFICIARY	239	424,027.21	11	8,767.71	250	432,794.92	
POP-UP OPTION	878	1,550,350.51	30	29,857.35	908	1,580,207.86	
10 YEARS CERTAIN	40	70,985.30	6	12,446.28	46	83,431.58	
10 YEARS CERTAIN & LIFE	120	180,139.02	24	30,532.62	144	210,671.64	
SOCIAL SECURITY OPTION							
OPTION C	93	141,763.73	7	6,925.90	100	148,689.63	
OPTION D	281	400,220.75	14	10,362.60	295	410,583.35	
OPTION E	0	0.00	0	0.00	0	0.00	
OPTION F	0	0.00	0	0.00	0	0.00	
DEPENDENT CHILD	93	26,281.06	72	20,137.34	165	46,418.40	
REFUND	0	0.00	0	0.00	0	0.00	
15 YEARS CERTAIN & LIFE	40	52,654.05	3	2,544.88	43	55,198.93	
20 YEARS CERTAIN & LIFE	80	122,037.19	16	13,216.72	96	135,253.91	
5 YEARS ONLY	0	0.00	0	0.00	0	0.00	
TOTAL	2,710	4,340,353.13	294	223,071.21	3,004	4,563,424.34	

COUNTY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION BENEFICIARY SUMMARY JUNE 30, 2001

	М	ALE LIVES	FEN	MALE LIVES	TOTAL		
		MONTHLY		MO NTHLY		MO NTHLY	
	NUMBER	BENEFITS	NUMBER	BENEFITS	NUMBER	BENEFITS	
BASIC FORM	0	0.00	0	0.00	0	0.00	
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00	
JOINT & SURVIVOR							
100% TO BENEFICIARY	197	66,728.89	1,116	397,114.03	1,313	463,842.92	
66-2/3% TO BENEFICIARY	19	5,240.09	125	43,188.89	144	48,428.98	
50% TO BENEFICIARY	39	9,557.99	234	66,238.26	273	75,796.25	
POP-UP OPTION	49	21,353.53	152	85,480.29	201	106,833.82	
10 YEARS CERTAIN	49	21,300.97	101	61,776.29	150	83,077.26	
10 YEARS CERTAIN & LIFE	71	34,733.11	126	58,358.97	197	93,092.08	
SOCIAL SECURITY OPTION							
OPTION C	0	0.00	0	0.00	0	0.00	
OPTION D	8	1,800.63	41	43,342.82	49	45,143.45	
OPTION E	0	0.00	0	0.00	0	0.00	
OPTION F	1	393.19	4	615.45	5	1,008.64	
DEPENDENT CHILD	0	0.00	0	0.00	0	0.00	
REFUND	0	0.00	0	0.00	0	0.00	
15 YEARS CERTAIN & LIFE	28	16,750.31	93	47,677.60	121	64,427.91	
20 YEARS CERTAIN & LIFE	24	8,329.90	47	32,165.45	71	40,495.35	
5 YEARS ONLY	124	48,581.86	61	48,894.97	185	97,476.83	
TOTAL	609	234,770.47	2,100	884,853.02	2,709	1,119,623.49	

COUNTY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION BENEFICIARY SUMMARY JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MO NTHLY BENEFITS	NUMBER	MO NTHLY BENEFITS	NUMBER	MO NTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	2	1,428.12	76	73,161.71	78	74,589.83
66-2/3% TO BENEFICIARY	0	0.00	15	15,063.30	15	15,063.30
50% TO BENEFICIARY	0	0.00	17	9,530.30	17	9,530.30
POP-UP OPTION	0	0.00	36	46,006.80	36	46,006.80
10 YEARS CERTAIN	8	16,024.84	11	16,219.26	19	32,244.10
10 YEARS CERTAIN & LIFE	0	0.00	1	36.88	1	36.88
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	1	3,291.27	33	45,844.74	34	49,136.01
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	3	2,982.82	3	2,982.82
DEPENDENT CHILD	1	290.30	0	0.00	1	290.30
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	0	0.00	1	74.63	1	74.63
20 YEARS CERTAIN & LIFE	1	1,158.96	4	7,039.93	5	8,198.89
5 YEARS ONLY	6	4,964.25	1	566.73	7	5,530.98
TOTAL	19	27,157.74	198	216,527.10	217	243,684.84

COUNTY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION VESTED RETIREMENT SUMMARY JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
AGE NEAREST		MONTHLY		MONTHLY		MONTHLY
BIRTHDAY	NUMBER	BENEFITS	NUMBER	BENEFITS	NUMBER	BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	25	2,703.75	2	230.77	27	2,934.52
25-29	40	6,264.72	40	5,095.28	80	11,360.00
30-34	99	22,147.22	178	29,673.44	277	51,820.66
35-39	173	52,534.39	306	67,684.63	479	120,219.02
40-44	192	72,453.48	484	103,568.52	676	176,022.00
45-49	275	103,121.14	566	133,323.75	841	236,444.89
50-54	282	115,306.04	636	170,080.97	918	285,387.01
55-59	165	58,354.37	305	66,323.35	470	124,677.72
60-64	90	25,815.58	116	24,404.01	206	50,219.59
65-69	31	4,090.26	32	5,989.95	63	10,080.21
70-74	10	862.93	10	2,298.17	20	3,161.10
75-79	14	1,256.73	5	554.93	19	1,811.66
80-84	1	156.92	3	329.62	4	486.54
85 +	0	0.00	0	0.00	0	0.00
TOTAL	1,397	465,067.53	2,683	609,557.39	4,080	1,074,624.92

COUNTY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION VESTED RETIREMENT SUMMARY JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
AGE NEAREST	MONTHLY		MONTHLY		MONTHLY	
BIRTHDAY	NUMBER	BENEFITS	NUMBER	BENEFITS	NUMBER	BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	7	1,371.48	1	190.01	8	1,561.49
30-34	22	7,824.77	3	726.24	25	8,551.01
35-39	21	8,162.63	8	1,942.77	29	10,105.40
40-44	24	10,916.26	5	1,940.02	29	12,856.28
45-49	30	13,058.24	3	1,372.26	33	14,430.50
50-54	11	5,121.22	4	1,015.96	15	6,137.18
55-59	3	836.13	1	70.89	4	907.02
60-64	3	369.97	0	0.00	3	369.97
65-69	2	565.07	0	0.00	2	565.07
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	123	48,225.77	25	7,258.15	148	55,483.92

COUNTY EMPLOYEES RETIREMENT SYSTEM NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION VESTED MEMBERSHIP SUMMARY

JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
AGE NEAREST	ACCUMULATED		ACCUMULATED		ACCUMULATED	
BIRTHDAY	NUMBER	CONTRIBUTIONS	NUMBER	CONTRIBUTIONS	NUMBER	CONTRIBUTIONS
15 10	0.001	007 000 00	110	00.050.01	0.404	404 740 17
15-19	2,321	385,886.36	113	38,853.81	2,434	424,740.17
20-24	738	657,989.04	429	189,866.34	1,167	847,855.38
25-29	966	626,194.68	1,849	1,202,258.60	2,815	1,828,453.28
30-34	1,210	941,610.86	2,723	2,079,874.04	3,933	3,021,484.90
35-39	1,043	827,436.04	2,260	1,830,321.13	3,303	2,657,757.17
40-44	968	746,135.58	2,230	1,840,980.48	3,198	2,587,116.06
45-49	892	800,090.55	1,884	1,912,674.71	2,776	2,712,765.26
50-54	725	917,674.76	1,396	1,515,905.51	2,121	2,433,580.27
55-59	446	599,092.95	726	785,234.03	1,172	1,384,326.98
60-64	307	336,556.05	372	345,498.81	679	682,054.86
65-69	171	167,419.47	160	146,774.47	331	314,193.94
70-74	93	66,820.67	89	44,354.49	182	111,175.16
75-79	61	23,993.72	41	16,323.35	102	40,317.07
80-84	27	15,619.03	17	7,306.33	44	22,925.36
85 +	8	2,277.17	11	3,698.29	19	5,975.46
TOTAL	9,976	7,114,796.93	14,300	11,959,924.39	24,276	19,074,721.32

COUNTY EMPLOYEES RETIREMENT SYSTEM HAZARDOUS DUTY EMPLOYEE CLASSIFICATION VESTED MEMBERSHIP SUMMARY JUNE 30, 2001

		MALE LIVES FEMALE LIVES		TOTAL		
AGE NEAREST BIRTHDAY	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS
15-19	64	15,822.02	0	0.00	64	15,822.02
20-24	33	61,746.22	0	0.00	33	61,746.22
25-29	84	157,207.46	15	38,873.61	99	196,081.07
30-34	79	129,436.87	18	34,820.48	97	164,257.35
35-39	51	92,597.27	14	8,856.86	65	101,454.13
40-44	33	55,104.64	7	3,329.61	40	58,434.25
45-49	20	81,468.39	5	7,144.15	25	88,612.54
50-54	17	27,967.04	5	53,485.16	22	81,452.20
55-59	7	29,108.72	3	5,211.32	10	34,320.04
60-64	2	11,948.61	1	1,009.88	3	12,958.49
65-69	3	1,542.03	0	0.00	3	1,542.03
70-74	1	239.26	0	0.00	1	239.26
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	394	664,188.53	68	152,731.07	462	816,919.60

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the County Employees Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 1998.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years for nonhazardous positions. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used. For a member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years.

For hazardous positions, final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

- (a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.
- (b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.
- (c) Employers may elect to purchase up to 6 months additional service credit based on an employee's unused sick leave.

Eligibility

Any county or political subdivision or instrumentality, including school boards or urban county government may participate in the System upon approval by the Board. Membership in the system consists of:

- (a) all persons who become employees of a county after such county first participates,
- (b) all persons who are employees on the date a county first participates and who elect within thirty days to become members and make contributions.

Membership does not include employees of a county who are members of some other state, county, or local retirement system, supported in whole or in part by public funds.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 2.20% of the member's final compensation multiplied by his service will be payable. For hazardous positions, a monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for

hazardous members). For non-hazardous position employees with 25 or more years of service, additional years of service credit will be added up to maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a \$5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of \$10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.50% rather than 2.20%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of \$5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (8% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contract provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

FORTY-THIRD ANNUAL ACTUARIAL VALUATION JUNE 30, 2001 STATE POLICE RETIREMENT SYSTEM FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the forty-third annual actuarial valuation of the State Police Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2001.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System as to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "level-percentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate is being increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the

medical insurance contribution rate is to be increased at the start of each biennium (coincides with valuations in odd numbered years) by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016. There will be no changes in the even numbered years unless there are actuarial gains relative to the retirement funding which will then be used to increase the medical insurance funding rate for the next year only.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

- 1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.
- 2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.
- 3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.
- 4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.
- 5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND	INSURANCE FUND
June 30. 2000 Valuation Assets	459.168.574	71.711.712
Cash Flows		
> Employer Contributions	1,516,267	8,113,391
> Member Contributions	4,138,298	, ,
> Retirement Benefits	22,644,170	
> Net Refunds	80,369	
> Insurance Premiums	·	3,545,672
> Administrative Expenses	64,171	28,055
> Investment Manager Fees	149,945	6,583
Valuation Interest Assumption	8.25%	8.25%
Expected Return on Valuation Assets		
Reflecting Actual Cash Flows *	37,168,439	6,103,206
Expected Valuation Assets	479,052,923	82,347,999
Actual Market Value of Assets	364,591,852	69,925,891
Investment Gain/(Loss)	(114,461,071)	(12,422,108)
Amortization Amounts From Prior Valuations		
> Valuation Year – 1		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year – 2		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year – 3		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year – 4		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior	_	
Valuations	0	0
Investment Gain/(Loss) to be Amortized from		
Current Valuation Date		
> Amount	(114,461,071)	(12,422,108)
> Amortization	(22,892,214)	(2,484,422)
June 30. 2001 Valuation Assets		
> Expected Assets	479,052,923	82,347,999
> Amortization Amounts	(22,892,214)	(2,484,422)
> Valuation Assets	456,160,709	79,863,577

^{*}Cash flows are assumed equally spread throughout the year

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1)	Mortality:							
	(a)	Active & retired lives	-	1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year.				
	(b)	Disabled lives	-	Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).				
(2)	Disabl	lement	-	Graduated rates based on 2000 experience study (no change from 1995 experience study).				
(3)	Termi	nation of employment #	-	Graduated rates based on 2000 experience study.				
(4)	Retire	ment	-	60% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.				
(5)	Marita	al status						
	(a)	Percentage married	-	100%.				
	(b)	Age difference	-	Males are assumed to be 3 years older than their spouses.				
(6)	Depen	ndent children	-	For duty related death benefits, it is assumed that the employee is survived by 2 dependent children, each age 6.				
(7)	Invest	ment return	-	8.25% per year, net of investment related expenses, compounded annually.				
(8)	Compensation progression #		-	1st year: 12.00% 2nd year: 10.00% 3rd year: 8.00% Thereafter: 6.50%, compounded annually.				
(9)	Under	lying Inflation Rate	-	3.50% per year, reflected in investment return and compensation progression assumptions.				
(10)	Retire	e Medical Insurance #	-	It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:				

	Rate in Effect
Plan Type	on Valuation Date
Single	
- Region 1	\$252.46
- Region 2	293.46
- Region 3	273.52
- All Others	234.00
Family	577.00
Parent Plus	350.00
Couple	525.00
Medicare*	
 Low Option 	96.41
- High Option	229.03

Region 1: Boyd, Carter, Elliott, Greenup

Region 2: Christian, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Todd, Trigg, Union, Webster

Region 3: Harlan, Lewis, Mason, Perry, Roberston

	Medicare Rate		Contracts	in Force
	Low	High	Low	High
<u>Carrier</u>	Option	Option	Option	Option
Anthem BC/BS	101.26	231.35	2,839	17,314
Bankers Life	91.78	216.94	272	156
Option 2000	83.05	216.51	504	1,767
Humana	85.00	247.00	490	1,729
Humana				
Gold Plus	85.00	136.00	17	507

^{*}Weighted average of current rates available from different carriers; weighting based on number of contracts in force.

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

<u>Years</u>	Medical Increase
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

- For those active members with incomplete data, the following assumptions were made:

(11) Missing data

- . If reported salary was zero or blank, then monthly salary was assumed to be \$2,139.58.
- . If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:
 - . Service under all systems is aggregated for purposes of determining benefit eligibility.
 - Future service is projected only under the system in which the member is currently active.
 - The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
 - The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Changes in assumptions from those used in 2000 valuation.

B. <u>SAMPLE RATES</u>

(1) Annual Rates of Mortality:

	Active Mo	rtality*	Disabled Mortality		
<u>Age</u>	<u>Males</u>	<u>Females</u>	Males	<u>Females</u>	
a =	0.050	0.020/	4.0204	2 (20)	
25	0.05%	0.03%	4.83%	2.63%	
30	0.06%	0.03%	3.62%	2.37%	
40	0.12%	0.07%	2.82%	2.09%	
50	0.40%	0.16%	3.83%	2.57%	
55	0.61%	0.25%	4.82%	2.95%	
60	0.92%	0.42%	6.03%	3.31%	

^{*}Plus 0.05% duty death rate prior to retirement.

(2) Annual Rates of Decrement:

<u>Age</u>	<u>Disablement</u>	Ultimate Termination		
		KERS and CERS Hazardous	<u>SPRS</u>	
25	0.042%	3.04%	1.82%	
30	0.050%	3.38%	2.03%	
40	0.132%	1.50%	0.90%	
50	0.530%	0.00%	0.00%	
55	0.992%	0.00%	0.00%	
60	1.743%	0.00%	0.00%	

(3) Compensation Progression (after 1st 3 Years):

		Compensation at Normal
	Rate of	Retirement as Percentage
<u>Age</u>	Annual Increase	Of Current Annual Compensation
25	6.50%	661.4%
30	6.50%	482.8%
40	6.50%	257.2%
50	6.50%	137.0%

SECTION III

RESULTS OF THE 2001 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the expenses of administration, is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated annual State payroll as of June 30, 2001.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2001 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the State Police Retirement System as of June 30, 2001 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements relative to the Retirement Fund.

Table X contains additional information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I

STATE POLICE RETIREMENT SYSTEM RETIREMENT AND INSURANCE FUND DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2001

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND					
			Percent *		
Total Actuarial Accrued Liability	\$	356,211,860	805.73%		
Assets at Actuarial Value		456,160,709	1031.81%		
Unfunded Actuarial Accrued Liability	\$	(99,948,849)	(226.08%)		
Contribution - Payment on Unfunded					
Actuarial Accrued Liability	\$	(5,139,966)	(11.63%)		
NORMAL COS	T - RETIREI	MENT FUND			
Retirement Benefits	\$	6,827,735	15.46%		
Disability Benefits		283,201	0.63%		
Withdraw al Benefits (Vested and					
Refund of Contributions)		275,027	0.62%		
Survivor Benefits		239,175	0.54%		
Total Normal Cost	\$	7,625,138	17.25%		
Less: Employee Contributions		3,426,389	7.75%		
Normal Cost - State	\$	4,198,749	9.50%		
TOTAL ANNUAL EMPLOYER COS	ST - RETIRE	MENT AND INSURAN	ICE FUND		
Normal Cost	\$	4,198,749	9.50%		
Payment on Unfunded Actuarial					
Accrued Liability		(5,139,966)	(11.63%)		
Administrative Expense		194,082	0.44%		
Subtotal - Retirement Fund					
(Not Less Than Zero)	\$	0	0.00%		
Group Hospital and Medical					
Insurance Premiums		9,540,506	21.58%		
Total Annual Cost	\$	9,540,506	21.58%		
* Based on estimated annual salaries of	\$	44,209,944			

TABLE II

STATE POLICE RETIREMENT SYSTEM RETIREMENT FUND

CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2001

ACTUARIAL AC	CRUED LIABILITY		
Active Members			
Retirement Benefits	\$	125,496,792	
Disability Benefits		2,661,774	
W ithdraw al Benefits (Vested and			
Refund of Contributions)		649,894	
Survivor Benefits		2,970,628	
Total - Actives	\$	131,779,088	
Inactive Members			
Retired Members and			
Beneficiaries	\$	224,139,350	
Vested Retirement		232,861	
Vested Membership		60,561	
Total - Inactives	\$	224,432,772	
Total Actuarial Accrued Liability	\$	356,211,860	
UNFUNDED ACTUAR	IAL ACCRUED LIAB	ILITY	
Total Actuarial Accrued Liability	\$	356,211,860	
Less Actuarial Value of Assets		456,160,709	
Unfunded Actuarial Accrued Liability	\$	(99,948,849)	
NORM	AL COST		
Retirement Benefits	\$	6,827,735	
Disability Benefits		283,201	
W ithdraw al Benefits (Vested and			
Refund of Contributions)		275,027	
Survivor Benefits		239,175	
Total Normal Cost	\$	7,625,138	
Less Employee Contributions		3,426,389	
Total Normal Cost - State	\$	4,198,749	

TABLE III STATE POLICE RETIREMENT SYSTEM UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

	Amount o	f Base on		
Date	Date	Current	Amortization	
Established	Established	Valuation Date	Payment	Source of Base
6/30/1990	\$ 8,982,071	\$ 11,211,586	\$ 765,650	Cumulative unfunded actuarial accrued liability set up as initial
				base under revised funding policy (30 year level percent of payroll
				method)
6/30/1991	9,963,656	12,308,804	809,599	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(24,502,117)	(29,884,826)	(1,897,806)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's;
				Asset valuation method change
6/30/1993	(3,706,436)	(4,453,445)	(273,646)	Experience gains/losses for 7/1/1992 to 6/30/1993; State
				contribution shortfall
6/30/1994	10,380,135	12,262,095	730,502	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's;
				State contribution shortfall
6/30/1995	22,729,292	26,349,676	1,524,698	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(17,793,855)	(20,209,741)	(1,137,748)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial
				assumptions
6/30/1997	(31,021,470)	(34,437,148)	(1,889,084)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree
				COLA effective 8/1/1996
6/30/1998	12,716,788	13,778,617	737,514	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average
				salary definition from 5 years to 3 years; Increase in death benefit
				from \$2,500 to \$5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(31,317,924)	(33,076,611)	(1,729,808)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree
				COLA effective 7/1/1998
6/30/2000	(77,707,399)	(79,904,019)	(4,087,730)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree
				COLA effective 7/1/1999
6/30/2001	26,106,163	26,106,163	1,307,893	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree
				COLA effective 7/1/2000
Total	\$ (95,171,096)	\$ (99,948,849)	\$ (5,139,966)	

TABLE IV STATE POLICE RETIREMENT SYSTEM **INSURANCE FUND** DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2001 **ACTUARIAL ACCRUED LIABILITY** Active Members 71,792,369 Inactive Members Retired Members \$ 74,905,454 Beneficiaries 11,063,908 Vested Retirement 499.748 Vested Membership Total - Inactives \$ 86,469,110 Total Actuarial Accrued Liability \$ 158,261,479 UNFUNDED ACTUARIAL ACCRUED LIABILITY Total Actuarial Accrued Liability 158,261,479 \$ Less Actuarial Value of Assets 79,863,577 Unfunded Actuarial Accrued Liability \$ 78,397,902 **NORMAL COST** Gross Normal Cost \$ 6,258,315 Less Employee Contributions Net Normal Cost - State 6,258,315 \$ Estimated Annual Salaries 44,209,944 TOTAL ANNUAL EMPLOYER COST Contribution Amount Normal Cost \$ 6,258,315 Payment on Unfunded Actuarial Accrued Liability 4,438,567 Total Annual Cost \$ 10,696,882 As Percent of Payroll Normal Cost 14.16% Payment on Unfunded Actuarial Accrued Liability 10.04% Total Annual Cost 24.20% INSURANCE FUND SHORTFALL Full Entry Age Funding Level 24.20% Current Funding Allocation * 18.47% Additional to Pick Up By 2016 5.73% Expected Increase in Insurance

0.00%

Without regard to any one-year temporary adjustments for actuarial gains

Fund Rate in 2002 Valuation

TABLE V STATE POLICE RETIREMENT SYSTEM UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2001

	Amount of Base on				
Date	Date		Current	Amortization	
Established	Established		Valuation Date	Payment	Source of Base
6/30/1996	\$ 73,323,619	\$	83,278,826	\$ 4,688,348	Cumulative unfunded actuarial accrued liability set up as initial
					base under revised funding policy (30 year level percent of payroll
					method)
6/30/1997	8,088,952		8,979,603	492,585	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual
					insurance fund contributions vs. full entry age amounts
6/30/1998	(2,668,212)		(2,891,002)	(154,744)	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual
					insurance fund contributions vs. full entry age amounts
6/30/1999	(13,378,283)		(14,129,553)	(738,933)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual
					insurance fund contributions vs. full entry age amounts
6/30/2000	(6,431,546)		(6,613,352)	(338,326)	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual
					insurance fund contributions vs. full entry age amounts
6/30/2001	9,773,380		9,773,380	489,637	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual
					insurance fund contributions vs. full entry age amounts
Total	\$ 68,707,910	\$	78,397,902	\$ 4,438,567	

TABLE VI STATE POLICE RETIREMENT SYSTEM BENEFIT PAYMENT PROJECTIONS

RETIREMENT FUND PAYMENT PROJECTIONS

Pla	an Y	ear	Total
7/1/2001	to	6/30/2002	24,097,000
7/1/2002	to	6/30/2003	25,621,000
7/1/2003	to	6/30/2004	27,245,000
7/1/2004	to	6/30/2005	29,268,000
7/1/2005	to	6/30/2006	30,727,000
7/1/2006	to	6/30/2007	33,372,000
7/1/2007	to	6/30/2008	35,408,000
7/1/2008	to	6/30/2009	38,393,000
7/1/2009	to	6/30/2010	40,983,000
7 <i>/</i> 1 <i>/</i> 2010	to	6/30/2011	43,222,000

INSURANCE FUND PAYMENT PROJECTIONS

Pla	an Y	ear	Total
7/1/2001	to	6/30/2002	4,403,000
7/1/2002	to	6/30/2003	5,014,000
7/1/2003	to	6/30/2004	5,688,000
7/1/2004	to	6/30/2005	6,392,000
7/1/2005	to	6/30/2006	7,084,000
7/1/2006	to	6/30/2007	8,035,000
7/1/2007	to	6/30/2008	8,832,000
7/1/2008	to	6/30/2009	9,885,000
7/1/2009	to	6/30/2010	11,012,000
7/1/2010	to	6/30/2011	12,175,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

TABLE VII

STATE POLICE RETIREMENT SYSTEM RETIREMENT FUND

ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIA	L ASSETS			
Fund Assets at Actuarial Value (Plus Refunds and			1	
Expenses Payable) *	\$	456,160,709		
Actuarial Present Value of Future Member Contribu		33,977,686		
Actuarial Present Value of Future Employer		, ,		
Contributions				
For Normal Costs	\$	41,422,943		
For Unfunded Actuarial Accrued Liability		(99,948,849)		
Total			\$	(58,525,906)
Total Actuarial Assets			\$	431,612,489
ACTUARIAL	LIABILITIES			
Actuarial Present Value of Future Benefits				
Inactive Members:				
Retired Members and Beneficiaries	\$	224,139,350		
Vested Retirement		232,861		
Vested Membership		60,561		
Total - Inactive			\$	224,432,772
Actuarial Present Value of Future Benefits				
Active Members:				
Retirement Benefits	\$	193,083,480		
Disability Benefits		5,395,695		
Withdrawal Benefits (Vested and				
Refund of Contributions)		3,386,840		
Survivor Benefits		5,313,702		
Total - Active			\$	207,179,717
Refunds and Expenses Payable	,		\$	0
Total Actuarial Liabilities			\$	431,612,489
Notes				
* Values as of June 30, 2001				
Market value of assets:			\$	364,591,852
Actuarial value of assets:			\$	456,160,709
Member's Contribution Account:			\$	34,338,478
** Present value of accrued benefit deferred to n	ormal retiren	nent date.		

TABLE VIII

STATE POLICE RETIREMENT SYSTEM INSURANCE FUND

ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIAL AS	SETS			
Fund Assets at Actuarial Value (Plus Refunds and				
Expenses Payable) *			\$	79,863,577
Actuarial Present Value of Future Member Contributions	(Note:	A II		
Future Member Contributions Credited Against Retire	ment Fu	nd)		0
Actuarial Present Value of Future Employer				
Contributions				
For Normal Costs	\$	69,968,924		
For Unfunded Actuarial Accrued Liability		78,397,902		
Total			\$	148,366,826
Total Actuarial Assets	•		\$	228,230,403
ACTUARIAL LIAI	ILITIES		•	
Actuarial Present Value of Future Benefits				
Inactive Members:				
Retired Members and Beneficiaries	\$	85,969,362		
Vested Retirement		499,748		
Vested Membership		0		
Total - Inactive			\$	86,469,110
Actuarial Present Value of Future Benefits	•			
Active Members:			\$	141,761,293
Refunds and Expenses Payable				0
Total Actuarial Liabilities	\$	228,230,403		
Notes				
* Values as of June 30, 2001				
Market value of assets:			\$	69,925,891
Actuarial value of assets:			\$	79,863,577

TABLE IX STATE POLICE RETIREMENT SYSTEM ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2001 GASB DISCLOSURE INFORMATION

GASB DISCLOSURE IN					
NUMBER OF MEMBERS					
Inactive Members					
Retired Members	767				
Beneficiaries	75				
Vested Retirements	12				
Vested Membership	78				
Total Inactive Members	932				
Active Members					
Vested Members	756				
Nonvested Members	260				
Total Active Members	1,016				
Total Members	1,948				

TABLE X

STATE POLICE RETIREMENT SYSTEM

ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2001

INFO	ORMATION REQUIRED UNDER	
	NUMBER OF M	EMBERS
Contracts in Force - Retire	•	107
(1) Single;	- 100% Paid	187
Pre-Medicare	- 75% Paid	2
	- 50% Paid	4
	- 25% Paid	1
(2) =	- 0% Paid	0
(2) Family;	- 100% Paid	121
Pre-Medicare	- 75% Paid	0
	- 50% Paid	1
	- 25% Paid	0
(2) Demont	- 0% Paid - 100% Paid	0 47
(3) Parent +; Pre-Medicare	- 100% Paid - 75% Paid	0
Pre-Medicare	- 75% Paid	0
	- 25% Paid	0
	- 0% Paid	0
(4) Couple;	- 100% Paid	222
Pre-Medicare	- 75% Paid	3
i re-intedicare	- 50% Paid	1
	- 25% Paid	2
	- 0% Paid	0
(5) Medicare Regular	- 100% Paid	8
(1)	- 75% Paid	0
	- 50% Paid	0
	- 25% Paid	0
	- 0% Paid	0
(6) Medicare High	- 100% Paid	272
Option	- 75% Paid	3
	- 50% Paid	1
	- 25% Paid	1
	- 0% Paid	1
ested Retirements		12
ested Membership		78
Active Members		1,016
	UNFUNDED MEDICAL BE	NEFIT OBLIGATION
Medical Benefit Obligation		
Retirees, Beneficiaries an	d	
Vested Terminated Me	mbers	\$ 86,469,110
Active Members		71,792,369
Total Medical Benefit Obl	igation	\$ 158,261,479
Net Assets at Actuarial Val	ue	\$ 79,863,577
Infunded Medical Benefit		\$ 78,397,902
NOTE: Medical Benefit Obl	igation based on Entry Age No	rmal Actuarial Cost Method

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from \$336,579,763 on June 30, 2000 to \$356,211,860 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from (\$122,588,811) to (\$99,948,849). Total actuarial value of assets as of June 30, 2001 was equal to \$456,160,709. The Unfunded Actuarial Accrued Liability increased from (281.19%) to (226.08%) as a percentage of annual payroll and increased from (36.4%) to (28.1%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from \$138,867,085 on June 30, 2000 to \$158,261,479 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from \$67,155,373 to \$78,397,902. Total actuarial value of assets as of June 30, 2001 was equal to \$79,863,577. The Unfunded Actuarial Liability increased from 48.4% to 49.5% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

The change in contribution rate between the 2000 and 2001 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

June 30, 2000 Contribution Rate	21.58%
Change in Payment Percentage Due to Covered Payroll Experience	(0.49%)
Investment Return Experience	
> Prior to Asset Valuation Method Change	0.06%
> Impact of Asset Valuation Method Change	2.54%
Salary Increase Experience	0.20%
Decrements Experience*	(0.26%)
Change in Insurance Fund Rate	
> One-Year Temporary Funding Rate	(0.33%)
> Increase in Long Term Funding Rate	0.33%
Change in Administrative Expense Rate	(0.21%)
Retiree COLA Effective 7/1/2000	0.55%
Legislated Changes	
> 3 Year Average Window for Nonhazardous	0.00%
Change in Actuarial Assumptions	1.23%
Reduction in Amount Available from Prior Year Retirement Fund Rate to	
Offset Current Year Increases	(3.62%)
June 30, 2001 Contribution Rate	21.58%
* Includes mortality, disability, termination of employment and retirement experience	ce.

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses is 0.00%. An additional 21.58% is required to fund medical insurance for retirees, bringing the required contribution up to 21.58%. This is the same as the current 21.58% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2002 should remain at the 21.58% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2002 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

STATE POLICE RETIREMENT SYSTEM - RETIREMENT FUND								
July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value of Assets	Increase in Assets			
1958	\$ 1,450,000	\$ 1,450,000	100.0%	\$ 0	\$ 0			
1963	4,553,258	2,008,476	44.1%	2,544,782	619,167			
1968	9,079,139	3,288,103	36.2%	5,791,036	789,709			
1971	11,828,727	2,441,888	20.6%	9,386,839*	1,339,726			
1974	17,737,434	3,179,448	17.9%	14,557,986*	1,935,105			
1975	23,182,081	6,169,445	26.6%	17,012,636*	2,454,650			
1976	28,693,129	8,231,367	28.7%	20,461,762*	3,449,126			
1977	34,561,413	10,436,161	30.2%	24,125,252*	3,663,490			
1978	49,950,102	21,440,957	42.9%	28,509,145*	4,383,893			
1979	55,391,206	21,487,985	38.8%	33,903,221*	5,394,076			
1980	67,580,562	26,663,397	39.5%	40,917,165*	7,013,944			
1981	71,526,728	23,296,425	32.6%	48,230,303	7,313,138			
1982	78,713,172	21,383,042	27.2%	57,330,130	9,099,827			
1983	81,944,546	16,187,460	19.8%	65,757,086	8,426,956			
1984	91,180,668	16,200,151	17.8%	74,980,517	9,223,431			
1985	99,269,825	14,253,583	14.4%	85,016,242	10,035,725			
1986	105,559,951	8,892,252	8.4%	96,667,699	11,651,457			
1987	111,541,989	1,347,385	1.2%	110,194,604	13,526,905			
1988	120,128,367	(870,182)	(0.8%)	120,998,549	10,803,945			
1989	134,550,773	3,200,220	2.4%	131,350,553	10,352,004			
1990	154,007,622	8,982,071	5.8%	145,025,551	13,674,998			
1991	170,009,955	1 9,191,881	11.3%	150,818,074	5,792,523			
1992**	182,996,056	(4,794,955)	(2.6%)	187,791,011	36,972,937			
1993	191,653,594	(8,667,374)	(4.5%)	200,320,968	12,529,957			
1994	206,763,310	1,442,801	0.7%	205,320,509	4,999,541			
1995	241,690,631	24,186,188	10.0%	217,504,443	12,183,934			
1996	244,540,812	7,025,466	2.9%	237,515,346	20,010,903			
1997	255,784,758	(23,858,517)	(9.3%)	279,643,275	42,127,929			
1998	294,427,019	(11,891,899)	(4.0%)	306,318,918	26,675,643			
1999	314,021,673	(43,601,523)	(13.9%)	357,623,196	51,304,278			
2000	336,579,763	(122,588,811)	(36.4%)	459,168,574	101,545,378			
2001***	356,211,860	(99,948,849)	(28.1%)	456,160,709	(3,007,865)			

^{*}Includes capitalized appreciation of investments.

^{**}Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.

^{***}Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

	STATE POLICE RETIREMENT SYSTEM - INSURANCE FUND									
July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value of Assets	Increase in Assets					
1990	\$ 64,784,801	\$ 58,268,284	89.9%	\$ 6,516,517	\$ N/A					
1991	74,163,248	65,231,704	88.0%	8,931,544	2,415,027					
1992	88,407,634	76,689,678	86.7%	11,717,956	2,786,412					
1993	95,290,099	81,004,620	85.0%	14,285,479	2,567,523					
1994	110,193,139	92,782,467	84.2%	17,410,672	3,125,193					
1995	118,995,732	97,795,537	82.2%	21,200,195	3,789,523					
1996**	101,132,886	73,323,619	72.5%	27,809,267	6,609,072					
1997	117,361,754	83,485,271	71.1%	33,876,483	6,067,216					
1998	124,501,076	83,090,576	66.7%	41,410,500	7,534,017					
1999	125,797,150	71,867,291	57.1%	53,929,859	12,519,359					
2000	138,867,085	67,155,373	48.4%	71,711,712	17,781,853					
2001***	158,261,479	78,397,902	49.5%	79,863,577	8,151,865					

^{**}Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the State Police Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding polices adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A.	Date	
Edward W. Maynard, F.S.A.	Date	

William M. Mercer, Incorporated 462 South Fourth Avenue, Suite 1500 Louisville, Kentucky 40202-3431 $\mathfrak{D}(502)$ 561-4500

^{***}Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

SECTION V STATISTICAL DATA AS OF JUNE 30, 2001

STATE POLICE RETIREMENT SYSTEM JUNE 30, 2001

EARNINGS BY AGE GROUPS

AGE		MALE			FEMALE			TOTAL	
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	3	72,000	24,000	0	0	0	3	72,000	24,000
20-24	40	1,022,640	25,566	1	8,256	8,256	41	1,030,896	25,144
25-29	162	5,077,752	31,344	11	357,432	32,494	173	5,435,184	31,417
30-34	230	8,691,300	37,788	11	432,696	39,336	241	9,123,996	37,859
35-39	182	7,875,120	43,270	5	210,468	42,094	187	8,085,588	43,238
40 - 44	146	7,111,272	48,707	7	332,472	47,496	153	7,443,744	48,652
45-49	126	7,024,380	55,749	2	123,876	61,938	128	7,148,256	55,846
50-54	69	4,490,196	65,075	0	0	0	69	4,490,196	65,075
55-59	20	1,356,264	67,813	0	0	0	20	1,356,264	67,813
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0
70-74	1	23,820	23,820	0	0	0	1	23,820	23,820
75+	0	0	0	0	0	0	0	0	0
TOTAL	979	42,744,744	43,662	37	1,465,200	39,600	1,016	44,209,944	43,514

EARNINGS BY SERVICE GROUPS

SERVICE GROUP	COUNT	MALE		COUNT	FEMALE EARNINGS		COUNT	TOTAL	 AVERAGE
GROOP	COONI	EARNINGS	AVERAGE	COONI	EARNINGS	AVERAGE	COONI	EARMINGS	AVERAGE
0	17	291,996	17,176	1	8,256	8,256	18	300,252	16,681
1	117	3,092,172	26,429	3	83,736	27,912	120	3,175,908	26,466
2	48	1,514,400	31,550	4	124,524	31,131	52	1,638,924	31,518
3	0	0	0	0	0	0	0	0	0
4	64	2,136,828	33,388	6	205,152	34,192	70	2,341,980	33,457
0-4	246	7,035,396	28,599	14	421,668	30,119	260	7,457,064	28,681
5-9	209	8,233,812	39,396	9	363,408	40,379	218	8,597,220	39,437
10-14	148	6,556,032	44,298	5	223,776	44,755	153	6,779,808	44,312
15-19	192	9,466,668	49,306	8	378,492	47,312	200	9,845,160	49,226
20-24	69	3,900,252	56,525	1	77,856	77,856	70	3,978,108	56,830
25-29	80	5,108,184	63,852	0	0	0	80	5,108,184	63,852
30-34	32	2,241,336	70,042	0	0	0	32	2,241,336	70,042
35-39	3	203,064	67,688	0	0	0	3	203,064	67,688
40+	0	0	0	0	0	0	0	0	0
TOTAL	979	42,744,744	43,662	37	1,465,200	39,600	1,016	44,209,944	43,514

STATE POLICE RETIREMENT SYSTEM JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE AGE								S	ERVICE	
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3									3
20-24	40									40
25-29	120	42								162
30-34	62	128	39	1						230
35-39	14	35	84	49						182
40 - 44	5	3	24	101	13					146
45-49	1			40	45	40				126
50-54			1	1	11	38	16	2		69
55-59		1				2	16	1		20
60-64										0
65-69	_									0
70-74	1									1
75+	0.46	200	1.40	100	60	0.0	2.0	2	0	0
TOTAL	246	209	148	192	69	80	32	3	0	979
FEMALE										
AGE	CDOUD							S	ERVICE	
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	0 1	5)	10 11	13 17	20 21	23 27	30 31	33 37	101	0
20-24	1									1
25-29	9	2								11
30-34	3	6	2							11
35-39	1	1	3							5
40 - 44				7						7
45-49				1	1					2
50-54										0
55-59										0
60-64										0
65-69										0
70-74										0
75+ TOTAL	14	9	5	8	1	0	0	0	0	0 37
IOIAL	14	9	5	8	1	U	U	U	U	3 /
TOTAL										
AGE	GDOIID.							S	ERVICE	
GROUP	GROUP.	5_0	 10_1 <i>4</i>	15_10	20-24	25-29		25_20	40+	TOTAL
0-19	3	3-9	10-14	13-19	20-24	23-29	30-34	33-39	40+	3
20-24	41									41
25-29	129	44								173
30-34	65	134	41	1						241
35-39	15	36	87	49						187
40-44	5	3	24	108	13					153
45-49	1			41	46	40				128
50-54			1	1	11	38	16	2		69
55-59		1				2	16	1		20
60-64										0
65-69										0
70-74	1									1
75+	0.60	010	4.50	000		2.2		_	_	0
TOTAL	260	218	153	200	70	80	32	3	0	1,016

STATE POLICE RETIREMENT SYSTEM JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE									SERVICE	
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3 24,000									3 24,000
20-24	41 25,144									41 25,144
25-29	129 28,960									173 31,417
30-34	65 30,144	134 39,726	41 43,819							241 37,859
35-39	15 30,450	36 39,268								187 43,238
40-44	5 28,973	3 41,056								153 48,652
45-49	1 33,492				46 56,985					128 55,846
50-54				1 45,684			16 68,906			69 65,075
55-59		1 37,908					16 71,177			20 67,813
60-64										0
65-69										0
70-74	1 23,820									1 23,820
75+										0
TOTAL	260 28,681	218 39,437	153 44,312	200 49,226	70 56,830	80 63,852	32 70,042	3 67,688	0	1,016 43,514
TOTAL EA	RNINGS	44,209,944					Note: Earnings shown in this			
AVERAGE 2	AGE		36.92					been limi	ted by	
AVERAGE :	SERVICE		11.77				401(a)(1	/) .		

STATE POLICE RETIREMENT SYSTEM TABULATION BY MONTHLY SALARY JUNE 30, 2001

	NUMBER OF MEMBERS				
MONTHLY SALARY	MALES	FEMALES	TOTAL		
UNDER \$ 500	3	0	3		
\$ 500 - \$ 749	2	1	3		
\$ 750 - \$ 999	1	0	1		
\$ 1,000 - \$ 1,249	2	0	2		
\$ 1,250 - \$ 1,499	1	0	1		
\$ 1,500 - \$ 1,749	1	0	1		
\$ 1,750 - \$ 1,999	8	0	8		
\$ 2,000 - \$ 2,249	43	0	43		
\$ 2,250 - \$ 2,499	77	3	80		
\$ 2,500 - \$ 2,749	68	9	77		
\$ 2,750 - \$ 2,999	45	0	45		
\$ 3,000 - \$ 3,499	214	9	223		
\$ 3,500 - \$ 3,999	198	10	208		
\$ 4,000 - \$ 4,499	134	4	138		
\$ 4,500 - \$ 4,999	77	0	77		
\$ 5,000 - \$ 5,499	47	0	47		
\$ 5,500 - \$ 5,999	35	0	35		
\$ 6,000 - \$ 6,499	13	1	14		
\$ 6,500 - \$ 6,999	4	0	4		
\$ 7,000 - \$ 7,499	5	0	5		
\$ 7,500 - \$ 7,999	1	0	1		
\$ 8,000 - \$ 8,499	0	0	0		
\$ 8,500 - \$ 8,999	0	0	0		
\$ 9,000 - \$ 9,499	0	0	0		
\$ 9,500 - \$ 9,999	0	0	0		
\$ 10,000 AND OVER	0	0	0		
TOTAL	979	37	1,016		
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF \$66,000 AND OVER	5	0	5		

STATE POLICE RETIREMENT SYSTEM MEMBERS WITH SERVICE IN ANOTHER SYSTEM JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN SPRS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	0	109	109
KERS - HAZARDOUS	1	20	21
CERS - NONHAZARDOUS	6	93	99
CERS - HAZARDOUS	3	66	69
TOTAL - ALL SYSTEMS	10	288	298
	MEMBERS CURRENTLY NOT	Γ ACTIVE IN SPRS	
SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	13	9	22
KERS - HAZARDOUS	7	1	8
CERS - NONHAZARDOUS	18	11	29
CERS - HAZARDOUS	44	4	48

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

STATE POLICE RETIREMENT SYSTEM RETIRED LIVES SUMMARY JUNE 30, 2001

	MALE LIVES		FEN	MALE LIVES	TOTAL	
		MONTHLY		MONTHLY		MONTHLY
	NUMBER	BENEFITS	NUMB ER	BENEFITS	NUMB ER	BENEFITS
BASIC FORM	68	162,680.44	6	5,599.34	74	168,279.78
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	107	229,688.83	1	885.33	108	230,574.16
66-2/3% TO BENEFICIARY	57	151,924.92	0	0.00	57	151,924.92
50% TO BENEFICIARY	56	135,475.08	2	1,989.44	58	137,464.52
POP-UP OPTION	186	488,449.17	1	519.18	187	488,968.35
10 YEARS CERTAIN	5	14,816.15	0	0.00	5	14,816.15
10 YEARS CERTAIN & LIFE	22	54,358.04	0	0.00	22	54,358.04
SOCIAL SECURITY OPTION						
OPTION C	34	72,899.59	1	1,688.19	35	74,587.78
OPTION D	165	345,938.24	5	3,691.45	170	349,629.69
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	8	2,081.00	4	1,073.07	12	3,154.07
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	10	21,371.15	0	0.00	10	21,371.15
20 YEARS CERTAIN & LIFE	25	54,241.14	4	3,342.14	29	57,583.28
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	743	1,733,923.75 S - 3	24	18,788.14	767	1,752,711.89

STATE POLICE RETIREMENT SYSTEM BENEFICIARY SUMMARY JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
		MONTHLY	,	MONTHLY	MONTHLY	
	NUMBER	BENEFITS	NUMBER	BENEFITS	NUMB ER	BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	3	4,236.97	45	88,659.27	48	92,896.24
66-2/3% TO BENEFICIARY	0	0.00	1	1,167.87	1	1,167.87
50% TO BENEFICIARY	1	997.32	8	10,492.70	9	11,490.02
POP-UP OPTION	0	0.00	6	15,094.36	6	15,094.36
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	0	0.00	0	0.00	0	0.00
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	0	0.00	7	15,508.27	7	15,508.27
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	1	248.81	0	0.00	1	248.81
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	1	2,990.97	0	0.00	1	2,990.97
20 YEARS CERTAIN & LIFE	0	0.00	2	7,270.97	2	7,270.97
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	6	8,474.07 S - 3	69	138,193.44	75	146,667.51

STATE POLICE RETIREMENT SYSTEM VESTED RETIREMENT SUMMARY JUNE 30, 2001

MALE LIVES		ALE LIVES	FEN	MALE LIVES	TOTAL		
AGE NEAREST BIRTHDAY	NUMBER	MONTHLY Benefits	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	
45.40		0.00		0.00		0.00	
15-19	0	0.00	0	0.00	0	0.00	
20-24	0	0.00	0	0.00	0	0.00	
25-29	0	0.00	0	0.00	0	0.00	
30-34	2	837.44	0	0.00	2	837.44	
35-39	3	1,007.34	1	279.99	4	1,287.33	
40-44	4	2,442.56	0	0.00	4	2,442.56	
45-49	0	0.00	0	0.00	0	0.00	
50-54	2	996.05	0	0.00	2	996.05	
55-59	0	0.00	0	0.00	0	0.00	
60-64	0	0.00	0	0.00	0	0.00	
65-69	0	0.00	0	0.00	0	0.00	
70-74	0	0.00	0	0.00	0	0.00	
75-79	0	0.00	0	0.00	0	0.00	
80-84	0	0.00	0	0.00	0	0.00	
85 +	0	0.00	0	0.00	0	0.00	
TOTAL	11	5,283.39	1	279.99	12	5,563.38	

STATE POLICE RETIREMENT SYSTEM VESTED MEMBERSHIP SUMMARY JUNE 30, 2001

	MALE LIVES		F	EMALE LIVES	TOTAL			
AGE NEAREST	ACCUMULATED			ACCUMULATED		ACCUMULATED		
BIRTHDAY	NUMBER	CONTRIBUTIONS	NUMBER	CONTRIBUTIONS	NUMBER	CONTRIBUTIONS		
15-19	8	562.32	0	0.00	8	562.32		
20-24	2	774.87	0	0.00	2	774.87		
25-29	13	21,192.76	2	73.90	15	21,266.66		
30-34	21	22,687.63	1	15.39	22	22,703.02		
35-39	16	5,527.88	3	2,727.88	19	8,255.76		
40-44	5	3,450.23	1	390.78	6	3,841.01		
45-49	4	3,704.33	0	0.00	4	3,704.33		
50-54	2	7,363.10	0	0.00	2	7,363.10		
55-59	0	0.00	0	0.00	0	0.00		
60-64	0	0.00	0	0.00	0	0.00		
65-69	0	0.00	0	0.00	0	0.00		
70-74	0	0.00	0	0.00	0	0.00		
75-79	0	0.00	0	0.00	0	0.00		
80-84	0	0.00	0	0.00	0	0.00		
85 +	0	0.00	0	0.00	0	0.00		
TOTAL	71	65,263.12	7	3,207.95	78	68,471.07		

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the State Police Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 2001.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

- (a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.
- (b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.
- (c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

The Bureau of State Police shall participate in the System. Membership in the system consists of all regular full-time officers of the Kentucky State Police who are entitled to exercise the powers of police officers.

Normal Retirement Date

A member may elect to retire upon attaining age 55 and having contributed to the System. Upon completion of 20 years of service credit, 15 of which are current service, a member may declare the normal retirement date to be some date prior to age 55.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

A monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member who retires on or after the normal retirement date with less than 60 months of service is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a member has 20 or more years of service credit (15 of which are current), an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 55th birthday up to a maximum of service credited to the last day of paid employment. Except for members with 20 or more years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 20 years. For members with 20 or more years of service credit, actual service will be used. The retirement benefit shall not be less than 25% of the member's final monthly rate of pay for those disabled in the line of duty. Ten percent of final monthly rate of pay for each dependent child is also payable if disability occurs in line of duty. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, a benefit will be payable to the beneficiary based on the member's age, years of

service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member dies in the line of duty and has a spouse as beneficiary, a \$5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member dies in the line of duty and has a dependent as beneficiary, a lump sum payment of \$10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee under KERS and CERS, using 2.50% rather than the non-hazardous benefit rate.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of \$5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include an annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 8% of gross compensation until age 55. On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The retirement system will pay a portion of the cost of participation for the retiree and dependents based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contact provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.